P. B. MINGLE CO'S

1913

CATALOGUE
OF
CLOVER, GRASS FIELD & VEGETABLE GARDEN SEEDS

103 MARKET AND
4 NORTH FRONT STREETS
PHILADELPHIA

1837 1913

MINGLE'S SEEDS

FOR

SPRING SEEDING 1913

The firm of P. B. MINGLE CO. has been engaged in the seed business at the old stand, No. 103 Market Street and No. 4 North Front Street, uninterruptedly since 1837, and is well known among its patrons as

HEADQUARTERS FOR CLOVER AND GRASS SEEDS,

being the largest handlers in this State.

Strict, personal application to the details of so large a business has earned them a valuable reputation as thoroughly reliable seedsmen, whose representations as to the quality of the goods they offer can implicitly be relied upon.

In addition to the principal lines above referred to they carry also, for the convenience of their customers, a full line of the BEST STANDARD VEGETABLE SEEDS AND SUNDRIES. See catalogue pages 16 to 40.

TERMS OF SALE—Cash with order.

REMITTANCE—May be made by draft on New York or Philadelphia, postal money-order, check, or cash by Express or registered mail.

PERSONAL CHECKS from unknown patrons will be cashed before order is executed.

POSTAGE—We pay postage on 5c. and 10c. packets of Garden seeds. For larger quantities, postage at the rate of 8c. per lb., peas and beans 16c. per quart, corn 15c. per quart, should be added. When, owing to bulk or weight, seeds cannot be sent by mail, we deliver free to express or freight stations in Philadelphia, the purchaser paying all other transportation charges.

PROMPT ATTENTION—Anticipating the wishes of our customers, we give orders our prompt attention on the day they are received, and if for any reason, delay is unavoidable, we send prompt notice.

WARRANTING SEEDS—It is a well-known fact that unfavorable weather (cold and wet, or hot and dry) has an unfavorable bearing on the germination of seeds, causing partial or complete failure of the crop; or the seeds may be, and frequently are, destroyed by vermin of various kinds; therefore, while we exercise the greatest care to have all seeds pure, reliable and true to name, our seeds are sold without any warranty, expressed or implied, and without any responsibility on our part as to results of crop. If the purchaser does not agree to these terms the seeds are at once to be returned to us.

OUR CUSTOMERS coming to the city, encumbered with overcoats, satchels, or bundles, have long found our store a convenient stopping place to leave same until their return from a shopping tour. This feature of our business is still in full swing and we shall be but too glad to continue accommodating our friends in this way, whenever the occasion may arise.

We invite an early transmission of your order for seeds.

Address plainly,

P. B. MINGLE CO.,

103 MARKET STREET

PHILADELPHIA.

Market Gardeners and Truckers requiring large quantities will b special quotations on same upon submitting us their orders.

CLOVER SEEDS

The Clovers as Soil Improvers—Like other leguminous plants, the clovers draw largely for their sustenance from the atmosphere, gathering nitrogen and other constituents required by cultivated crops; their roots penetrate deeply, drawing from the subsoil, thus acting as a soil improver, and not only increasing the productiveness of the land, but putting it in better condition than before. It would be vastly better if, instead of leaving these lands unoccupied, they were sown in clovers. In this way farmers would not only get a crop of forage, but the land would be very much improved by this crop being grown on the soil. Clover, intelligently used, is the farmer's best friend, not only furnishing most nutritious feed, but restoring fertility to wornout lands. It is strongly to be recommended, however, that clover be used in a rotation of crops and not grown successively on the same fields. A top dressing of 200 pounds of land plaster to the acre on clover in the spring improves the growth wonderfully.

Alfalfa—Within the past few years alfalfa has grown rapidly in favor, proving its superiority to all clovers and other natural fertilizers, until to-day it stands without a peer in profitable results and in its virtues as a sub-soiler and fertilizer. It is well named "the silent sub-soiler."

As a rule, alfalfa thrives best on a sandy loam with porous sub-soil, or in other words, alfalfa will thrive and yield rich, bountiful crops of hay and seed on any soil that will grow corn.

No matter how heavy it rains, or how deep the snow falls, or how wet the spring or winter is, if the soil is well drained it will flourish through all, and yield three to four cuttings each season. Its roots bore down silently into mother earth until they reach a depth of from twenty to thirty feet, thus storing up nitrogen, and when these roots decay they leave not only a generous supply of fertility for any desired crop, but millions of openings into which air and rains find their way and help to constitute an unfailing reservoir of wealth upon which the husbandman can draw with little fear of protest or overdraft. It succeeds best on soil containing an abundance of lime. Some lime is absolutely necessary to success with it. Therefore, if the soil is deficient in this respect it will pay the farmer to use some on his alfalfa fields.

One of the strong points in the manurial values of clover is its capacity to absorb and store up nitrogen in the soil for the use of other plants, especially wheat. Large quantities are contained in the earth and air, and clover absorbs and fixes this substance more than any other plant.

Alfalfa should be cut earlier in its stage of growth than other grasses, when about one-tenth in bloom being the best time to cut. Early cut hay is much the best for cattle and horses, as has been shown by feeding trials. Do not cut too much at once, for if you allow the hay to get wet it loses one half its value for feeding purposes.

The best method we have found for cutting alfalfa, is to mow and let it wilt enough so that the rake will gather it up clean and let it cure in the winrow. When cured in this manner, it is very important that there be ample facilities for putting it in the stack as rapidly as possible, otherwise it will become too dry and the best part of the hay, which are the leaves or foliage, will be lost in handling, especially if it has to be drawn from the field on wagons.

How to so v Alfalfa—When alfalfa is sown in the spring it is generally considered best to plow the land in the fall, provided, however, the land will not blow during the winter, otherwise the land should be plowed very early in the spring, and worked until there is a solid seed bed. The preparation of the seed bed is an important point. It should be prepared as thoroughly as for a garden plot, plowing deep early in Spring, and working the soil until seed time with harrow and roller, until it is thoroughly pulverized. This working will kill many of the weeds. If weeds spring up before the alfalfa gets a good start, mow them down before going to seed, but after the alfalfa gets well established it will easily crowd them out. The land should be harrowed after each rain to destroy all seed growth and reduce the soil to the finest possible tilth.

As it is very difficult to reseed patches in an alfalfa field, it is advisable to use a generous amount of seed, say twenty pounds per acre. If the soil is properly prepared, a less amount will do. The seed may be sown broadcast or with a drill.

Usually the second crop is the best for seed and should be cut when all the seed pods have turned brown. Cut with a self-rake reaper, if possible, and let it lie until thoroughly dry, and then handle with a barley fork or sweep rake that will carry the bundles without dragging. This will avoid shattering the seed.

Avoid stacking, if possible, as stacks take water easily, which is liable to cause the seed to turn dark in color. Thresh with a clover huller or threshing machine in field.

Alfalfa Hay—Can the Farmers in the East Produce the Crop and Get Profit From It? The possibilities in the reduction of feed bills from the free use of alfalfa hay or the same ensiloed have hardly begun to be exploited yet. The exportation of bran and preparation of many other substitutes of less or doubtful character make it still more desirable for some good substitute to be produced on the farm, at small cost. This because wheat bran is likely to remain a high-cost by-product while the substitutes are put together for profit, and not particularly to reduce the cost of the food combination to the consumer.

In alfalfa, however, a very low cost is combined with the highest digestibility. That live stock are partial to well-made alfalfa hay may be easily demonstrated, if any man doubts; by trying it with animals which have not been accustomed to feed on it.

During the first few months of its life alfalfa may be regarded as a tender plant, both as regards cold and drought. After it has passed through its first summer, alfalfa is extremely resistant both to cold and to drought.

Alfalfa hay is extremely valuable for dairy cows. Its price in central Nebraska varies, but ranges from $5.00 to $10.00 per ton. A few Pennsylvania farmers have had it shipped east, where it costs $17.00 per ton, or about $2.00 per ton more than bran. You can imagine the benefit to be derived by raising it yourself. Why not try it?

Cutting Alfalfa—One of the strongest reasons why alfalfa should be grown in the place of other forage grasses is the fact that a small tract of land, when once set in alfalfa, will produce as much forage as four or five times as much land in any other grass. Timothy, as is well known may not be cut more than once in a season and when it is cut seldom yields more than half as much hay as a single cutting of alfalfa. The latter crop can be cut four or even five times in a season, and a single acre has been known to yield ten times as much hay in a single year as an adjoining acre of timothy. Sometimes it is best not to cut it the first year, unless there is a big growth, as there is some trouble in getting it through the first Winter in the north. For this reason it should not be cut close, or else it should be covered with some coarse litter the first Winter. Alfalfa suggests intensified farming, and the best of it is that the ground is actually growing better and more fertile from year to year while yielding these enormous crops.

Alsike, or Swedish Clover—This is somewhat similar in growth and appearance to Red Clover, but it is hardier and stands cold weather better than Red Clover, and where conditions of soil and lateness of seeding make any possibility of winter-killing, it is advisable to sow Alsike Clover, or at least to sow it in mixtures with other clovers. It is more suited to our mountainous sections than to the coast regions, and it succeeds better on stiff or clay soils than on lighter lands; may be cut several times in a season; it is perennial, and its long, strong fibrous roots take a firm, deep hold on the soil, preventing washing away of the extra earth from hillsides. It produces superior pasturage, and is much liked by cattle; grows well on any soil; stalks are fine and palatable, blossoms globular, sweet and fragrant, and much liked by bees. It is well adapted for sowing with Timothy or Herds Grass, as it matures with these crops, flowering a little later than the Red Clover. The blooms are not quite as large as the Red Clover, and are of a light pink or flesh color. Sow in Spring or Fall, at rate of about twelve pounds per acre.

Crimson or Scarlet Clover—Or more commonly called Scarlet, Italian or German Clover, is an annual of French origin, makes a growth from 20 to 30 inches high, has a bright crimson blossom from 1½ to 3 inches long, and when in full bloom with its luxuriant growth of green foliage and its crimson bloom, is a thing of beauty. It is a winter crop, must be sown (12 to 15 lbs. per acre) in July, August and September of each year from which the spring following can be cut for soiling, by the 20th, of April; for Ensilage and hay by the 8th of May, and for seed crop by the 25th of May. It will produce on ordinary soil 12 to 15 tons of green food per acre, 1½ to 2½ tons hay per acre, and 2 to 12 bushels seed per acre. Ploughed under as a manurial crop it is worth as a fertilizer $30 per acre. Experiments at the Delaware Experiment Station, have shown that $1 invested in seed per acre added 24 bushels corn, while $1 worth of nitrate soda per acre increased the yield of corn only 6 bushels.

This plant provides a good pasture before other crops are available. An early pasture is not only valuable for food contained in it, but also because it helps to insure proper feeding and to prevent too early use of other and later pasture. The crop when 6 inches high contained over 1,300 pounds of digestible food per acre, sufficient to properly nourish 12 cows for one week. When sown in July and August it furnishes excellent pasture in December, can also be pastured some in early spring without injury to either hay or seed crop. When Red Clover failed to give a good stand or blighted on wheat stubble, the stubble can be harrowed over and Crimson Clover sown, which will more than make up the loss of the Red Clover. Crimson Clover weighs sixty pounds to the bushel. Ten

to fifteen pounds are necessary to seed an acre properly, and after sowing the seed it should be covered by harrowing with a light harrow.

It makes an abundant food of highest quality. As pasture, stock prefer it to other grass. As a soiling crop or for Ensilage it cannot be excelled, and for hay, stock not only have a decided preference for it, but they thrive remarkably upon it.

The Delaware Experimental Station sums up its uses as follows:—

1. To Plow down for Green Manure.
2. For Silage.
3. For Soiling.
4. For Haymaking.
5. For Seed Production.
6. For Eradication of Weeds.
7. For Reduction of Expenses in Cultivating Orchards.
8. For Winter and Spring Pasture.
9. As a Protection for Falling Fruit in Orchard.
10. For Binding drift Soils and for preventing Washing on Hill Sides.

Mammoth, Sapling or Pea Vine Clover—This is similar to Medium or Common Red Clover both in the appearance of the seed and its habit of growth, the difference being that it usually grows larger and is later maturing. It is considered superior as an improver on account of the extra growth. It is a good variety for thin soils, or to seed with Timothy, meadow Fescue or Herds Grass or Red Top, as it matures about the same time as these grasses. Is best adapted for ploughing under as green manure; it grows five or six feet high, has large, coarse stalks, which are not liked by cattle. It is not ready to cut for hay until long after the common variety, and when cut leaves the ground bare, making no second growth. The appearance of the seed of this is identical with the Red Clover, and on this account it is impossible to distinguish any difference between the two by the apperance of the seed. We always obtain our supplies from reliable sources, but in this, as in all other seeds, we give no warranty in any way, simply using every reasonable care to supply Mammoth, or Sapling Clover as ordered. Sow ten to twelve pounds per acre by itself, or with Timothy six pounds of Clover and eight pounds of Timothy will give a liberal seeding.

Medium, or Common Red—This is the most important of all varieties of Clover for practical farm purposes; makes excellent pasturage, and fine hay crops when sown with Timothy, Orchard and other grasses, as the latter ripen about the same time. It is one of the best fodders for milch cows or sheep, and improves the land by adding humus to the soil.

It is a perennial, growing to a height of 1½ to 2 ft., yields crops several years from one seeding, and on good land, yields two to three cuttings annually. It should be cut for hay when in full bloom.

Sown by itself sow, either in Fall (July 1st to Sept. 5th) or in Spring (Feb. 1st to Apr. 15th) at the rate of twelve to fifteen pounds per acre, according to nature of the soil.

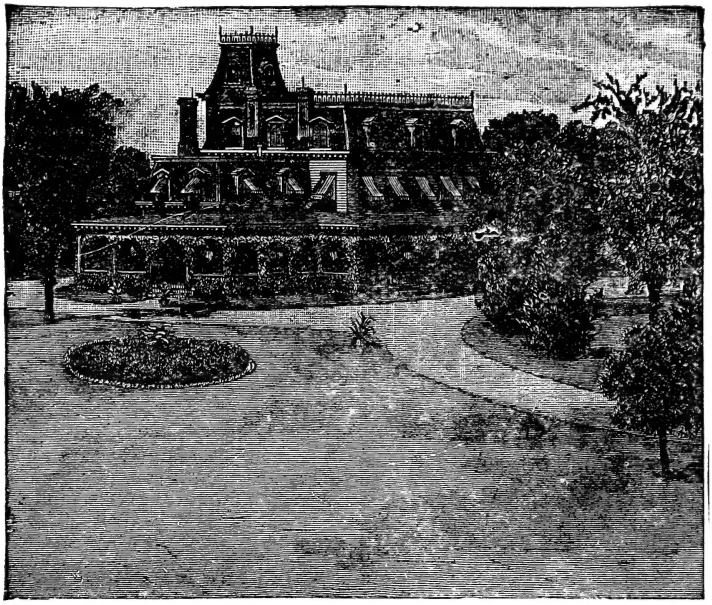
White Dutch Clover—A small, low growing variety, with creeping stems; mixed with Blue grass or Perennial Rye Grass, or Timothy, it makes a permanent pasture of great value. It is very largely used in lawn and pasturage mixtures, and is indigenous to the soils throughout this section. It makes a small, close, compact growth, covering the ground like a carpet. Succeeds and does well all throughout the North. Its blossoms are round, white, tinged with red, and sweet scented; stems fine and palatable, with numerous leaves of bright green color, blotched with white. Sow either in the spring or fall. When sown by itself, sow at the rate of ten lbs. per acre. It is better, however sown in mixture with other grasses.

GRASS SEEDS

Herds or Red Top Grass—A permanent and very hardy native perennial grass, succeeding best on moist land, making a good pasture when fed close; is valuable for low, wet meadows, producing large crops of good hay. It accommodates itself to a variety of soils, however, even to quite dry situations, and stands our hot climate admirably. It is, perhaps, the most permanent grass we have. It remains green for the greater part of the year, sown with Timothy and Red Clover, its stems form a very close matting turf, not affected by trampling, and of fair quality when not allowed to go to seed. Sow 1½ to 2 bushels per acre.

Kentucky Blue Grass—Perennial. Height, 10 to 15 inches. This valuable grass is suited to a variety of soils, from an average dry one to moist meadows, and makes an excellent pasture grass producing a most nourishing food for cattle, retaining its qualities till a late period in Winter and further South affording abundant food during the Winter. It is very productive, unusally early, and presents a beautiful green appearance in early spring, while the other grasses are yet dormant. It makes a splendid lawn grass, forming a thick turf, and being of very even growth. Kentucky Blue Grass also makes hay of excellent quality, but the yield for this purpose is not equal to some other grasses. In connection with White Clover it affords a fine and close lawn; for this purpose an extra quantity of seed must be used, two and one-half bushels Blue Grass and six pounds of White Clover per acre. If sown by itself, either in Spring or Fall, 40 to 50 pounds per acre are required.

LAWN GRASS



Mingle's Finest Velvet Lawn Grass—The making and keeping of a lawn depends largely upon the thorough preparation of the soil before the seed is sown, as a good soil foundation is one of the essentials. The soil should be well drained and not too rich. The top soil only should be worked to a depth of 4 to 6 inches and none of the sub-soil brought to the surface. Work it thoroughly afterwards with a fine steel rake or fine-toothed harrow, crossing and recrossing to obtain as fine a tilth as possible. If grading is necessary to secure an even surface, first remove and afterwards replace the top soil after the grading is completed. Tree and shrub planting, and laying out flower beds, should be done first. Lawns properly cared for, well fertilized and kept closely mowed, will improve year after year. Weeds should be removed as far as practicable, before sowing. Lawn grass, to produce a succession of verdure, must naturally consist of a mixture of several grasses, as some are more luxuriant in the Spring, others in Summer, and others again in Autumn. A proper combination of these various sorts is required to create and maintain a perfect, carpet-like lawn, and such is **Mingle's Velvet Lawn Grass Mixture.**

Fertilizing—After the ground has been well prepared, apply well-decomposed manure, pulverized, and applied evenly, good superphosphate, or pure ground bone meal. The latter is best, as it is more desirable and lasting in its effects, and, being not only free from weeds (which stable manure is not), it is also less liable to burn the young grass. Apply it at the rate of 400 to 600 pounds per acre, well raked or harrowed in before sowing.

Sowing—One quart of seed will sow a space 15 x 20, or 300 square feet. Five bushels are required to the acre, but six bushels would not be excessive, as heavy seeding is required to make a dense plant growth. The seed should be broadcasted on a calm day, preferably

in the morning (better just before an expected rain), if in Spring from March 15th to middle of May, or in the Fall in August or September. It should be lightly covered to a depth of not over one-quarter of an inch with a fine rake and afterwards rolled, if the soil is sufficiently dry to prevent the earth sticking to the roller. This compacts the soil around the seeds and better promotes germination. Oats are sometimes sown with the grass in order to shade and protect it during its growth. If used, it should be kept close cut with the grass, and will die out in Winter. As soon as the frost is out of the ground the land should be gone over with a roller. Winter frosts loosen the soil and rolling is necessary to compact it again. Roll frequently. An occasional top dressing with wood ashes is very beneficial. It is always best to freshen a lawn in the Spring with new seed, even if the grass is growing.

Mowing—Frequent and close cutting, after the grass is about three inches high, keeps down the weeds and coarse grasses, and the short cuttings, falling down about the roots, form a mulch which helps to protect the grass from the burning sun of July and August. Applications of bone meal or fertilizer spreads the fine grasses, making a denser growth. Too close cutting in Summer, however, should be avoided, as top growth then protects the plants better from the burning sun. A good top growth is also necessary to protect the roots from Winter frosts. Mow with a lawn mower, permitting the cut grass to remain on the ground, as it strengthens the roots and protects the young grass.

Weeds—frequently lie dormant in the ground a number of years and make their appearance when the ground is turned up or when the grass is sunburned, and crab grass is likely to make its appearance. Very often the seedsman receives the blame. It is a mistaken idea that weeds in shading the grass protect and aid it in its growth; on the contrary, the grass is much better able alone to cope with the sun's rays than to overpower the rank weeds that appear in every lawn.

Repairing Old Lawns—For bare spots, follow the same procedure as indicated in preparing a new lawn, but using only half the quantity of seed.

Natural Green Grass—This is the grass "par excellence" for lawns, making a fine close surface of dark green velvety color. It is very sensitive to good treatment, and will in most cases drive out the other grasses and take possession of the soil. Should be sown not less than two bushels per acre.

Orchard Grass—A most valuable grass for pasture or hay land, and on account of its earliness very valuable for permanent pastures. It furnishes the first green bite in the spring two weeks earlier than most grasses, and when fed off is again ready for grazing in a week, and the last in the fall and is quick to recover from close cropping, and even thrives better the more it is cropped. It is palatable and nutritious and stock eat it readily when green; it will also withstand severe drought, keeping green where many grasses wither, and will endure considerable shade as in orchards and groves.

When grown for hay, more than one crop can be obtained in one season, and where but one crop is taken the aftergrowth is very heavy, and gives splendid and rich pasture till late in the fall. It will stand drought, and being very hardy, is of especial value for our Northern States, where it does not winter-kill. It grows in tufts, and is, therefore, not adapted for sowing alone or by itself; but when sown together with red clover, rye grass and tall meadow oat grass, a close and even sod can be had. With clover alone it makes excellent hay as it blossoms at the same time and they should be cut together; for grazing it has no equal and should be used more than it is; it has a tendency to grow in tufts, which can be prevented by close cropping and heavy seeding. Will grow on almost all kinds of land, but gives best results on deep rich sandy loam or clay soils. When sown alone one and a half to two bushels per acre are required; if sown with clover half that quantity. It is a perennial and will last for years but its habit of growth unfits it for lawns.

Pasture Grass Seed (*for permanent pastures*)—Having given our attention to grasses for this purpose for many years, and after practical results and experience, we have succeeded in creating a mixture which we can highly recommend.

If there is any land you wish to set in permanent pasture, we can supply you with a mixture of any description required or a special mixture admirably suited for this purpose at a very reasonable cost. We are headquarters for all kinds of grass seeds and can save you money on your purchases. Of the ingredients in it, the timothy and the clovers come right along and give some feed the year of sowing and a good deal of it the next year, while it isn't till that year that the blue grass begins to show. But where the red clover begins to disappear and the timothy gets thin the blue grass is just setting up in business and the other grasses are not missed. And when established the blue grass is a stayer. and it and the white clover, which also sticks, makes a combination that is all right.

All authorities agree that for both pasture and hay, best results are obtained from the use of grass seeds in mixture. The reasons are that: First—A number of species will insure a much denser growth than the same number of seeds of one or two species, and prove less exhausting to the soil, since they live to a large extent on different constituents. Second—Seasons that affect some grasses adversely are favorable to other sorts. So that with mixtures a failure is practically impossible, provided, of course, the seed is good. We take great pains in selecting grass seed, in order to secure the highest germination, and our mixtures are based on a full appreciation of the requirements of the different soils for which they are intended. We have made a study of this subject and have grass specialists in our employ and can furnish the seed of the best varieties of grasses mixed in proper proportions for any soil or climate. Sow 2½ to 3 bushels per acre.

Building up Pastures—The grass lands of this country are the neglected parts of our agricultural lands. On almost every farm the permanent pasture is a piece of land that could not be utilized for any thing else. We need to begin at the beginning, and build up grass lands the same as we build up for other crops. We need to feed grass lands just as we improve corn lands and make them raise seventy-five bushels of corn per acre, and when such lands are put to grass the returns will be correspondingly increased.

We need to give the grass lands the same degree of careful attention annually that we give to lands for other crops. Grass lands should be given top dressing, and a harrowing or a discing, or other means of cultivation that will keep the soil in the best possible form. We must have a stand of grass, and grow grass, not weeds. Our grass lands have been so neglected, so over-stocked and over-grazed in dry seasons and dry times, and go into the winter so closely eaten and so bare that the winter winds and the freezing will kill out a portion of the grass, and in the spring we have a half stand of grass instead of a full stand; then the weed crop comes in to take possession—nature provides for covering the soil—the weeds take possession to the exclusion of the grass, and one-half the strength of the land will go to the production of weeds instead of a crop that is valuable for feeding purposes. We want to remedy this in the first place by taking such steps as will insure a full, strong stand of grass, which is just as important to produce a good crop as it is to have a stand of corn to produce a good crop. The grass can be restored without plowing by a reseeding—without putting a plow into it. The best grasses produced in this State, as well as in all parts of the world, are on the lands that produce grass permanently, that are never plowed.

"I am going to sow a grass mixture on old plow land for a pasture, but it is to be used one or two years for a meadow. The tract is not level, there is some high land and a few small sloughs, but it is all plowed. On the low land I will sow red top alone and on the high land I wish to sow a mixture such as red and white clover, blue grass, timothy, red top, alsike and alfalfa with nurse crop." Ans.—On the low land sow solid red top 5 lbs., and alsike clover 3 lbs., on the top land sow timothy 6 lbs., red clover 4 lbs., alsike clover 1 lb., and white clover 1 lb. For the nurse crop sow one-fourth less seed per acre than ordinarily.

Grazing—Many of the pasture fields are grazed too close to the ground. When a herd of cows have free access to pasture, they really cut the grass down many times, and much closer than is usually done with the mower. No plants will thrive if not given an opportunity to make growth, and the grass on some pastures is killed by continually checking the growth while the feet of the animals greatly damage the grass, as the smaller the supply the more trampling by the stock. When this condition exists, sow field with light pasture mixture, keep stock off until it is well started. In the meantime the older grass will recover its normal condition.

Perennial Rye Grass (*or English Rye Grass*)—A nutritious permanent grass for meadows and pasture, or for mixing with other grasses for lawns. Does well on sloping banks, as its roots are fibrous and mat-like. Is especially adapted for pastures, as it will

endure close cropping, and is of strong, quick and successive aftergrowth. It produces an abundance of foliage which remains bright and green throughout the season, and for this reason is also much used for lawn grass mixture. It is also well adapted for permanent meadows, and yields large quantities of very nutritious hay, which is well liked by all kinds of stock. Does well on almost any land, but prefers rich or moist soil, such as will produce a good corn crop. Should be sown in the Spring in quantities of one and a half to two bushels per acre.

Hard Fescue—A sub-variety of Sheeps Fescue, growing about 2 feet high. It is a small, even, tuft-forming grass with narrow blades and still finer bottom leaves of a deep green color. It thrives on both medium and light soils, and is frequently used in lawn mixtures.

Red Fescue—A partly creeping, partly tuft-forming bottom grass, with sparse, narrow blades, useful for both grazing and hay-making purposes. It thrives on all soils, even on dry sandy bottoms, and forms a rather thickly covered turf, leaving very little room for weeds to come through. It is one of the earliest grasses, and comes to the front at a time when young fodder is most looked for. It is useful in small proportion in mixtures for permanent pastures on heavy soils. Its deep-green narrow blades make it useful grass for lawns under shade.

Italian Rye Grass—When sown alone early in Spring it thrives quickly and can be mowed twice the same year and produces fine fodder. The Italian Rye Grass, being an annual, is preferable to the Perennial, where a one year's stand only is required, but if the field is to stand over the second year we would prefer the Perennial, as it is stronger, but, on the other hand, the Italian gives larger yields, and is less hard and wiry.

Timothy—This crop to cut for hay, probably surpasses any other grass in cultivation, it thrives best on moist, loamy soils, and is not well suited to light, sandy or gravelly soils, it should be cut just when the blossom falls. Sow either in Spring or Fall, at the rate of twelve pounds per acre, if alone, but less if mixed with other grasses.

PERMANENT GRASSES

We also furnish single grasses, or several kinds in a mixture, for the production of hay or permanent pasture, to suit either heavy or light land; in special mixtures of our own, or other formulas preferred by our own customers, to suit the requirements and nature of the soil.

MILLETS

German. or Golden Millet—A much improved variety, medium early, growing three to five feet high; the heads are closely condensed, though the spikes are very numerous. It is an enormous cropper; should be sown not less than one bushel per acre, if less will grow coarse and woody, in which state it is not relished by cattle. Millet is somewhat difficult to cure, and if it can be matured early enough to get the warm sun of August or early September it will be a decided advantage, but sixty days is usually long enough to grow it for hay. It should be cut for hay as soon as it comes into blossom, the point being to prevent formation of seed. The reputation that millet has for being injurious to stock has largely arisen from the hay being allowed to over-ripen before cutting, a large portion of the seed being matured. It is the seeds rather than the hay that injures stock, since they are very hard and not easily digested. The writer has seen the manifolds of a cow packed full of seed, causing indigestion, from feeding over-ripe hay.

It must be remembered that Tennessee German Millet is the best in the world, being sown and cultivated for seed and compared with seed grown elsewhere the Tennessee grown is purer and better in every way.

After all danger of frost is past, break the land and thoroughly pulverize it, then sow at the rate of one to one and a quarter bushels per acre, and roll or harrow in, and cut when seed are in the dough; cure as timothy.

For Hay—Either sown together or separate, are unsurpassable both as to quantity and quality of hay.

Hungarian Millet—This belongs to the millet family, growing less rank, with small stalks often yielding two to three tons of hay per acre; like millet it is an annual, and requires to be sown every season, but will produce a larger return than almost any other crop. Sow one bushel per acre and cultivate like millet; all kinds of stock eat it with avidity.

For Hay—Either sown together or separately, are unsurpassable both as to quantity and quality of hay.

FORAGE SEEDS

The best and most profitable forage crop for early spring sowing is Canada field peas and oats, about one and one-half bushels of each to the acre. Sow as early as possible just to make a good seed bed. Both plants love a cool, moist climate and those conditions usually do not exist late in the summer. This crop is usually ready to cut for the cows at the end of June or the beginning of July, and what is not fed as a soiling crop is cut before ripening, and if cured properly makes a very palatable and nutritious hay. As soon as the crop is off, the ground is top dressed with manure and a seed bed prepared with the cutaway or the disc harrow and seeded to golden or German millet, which will make a heavy crop of hay by the 10th or the 15th of September, when the ground is manured or fertilized again and seeded to winter rye one and one-half bushels to the acre, and that will be ready to cut a fine crop by May 1st, making three heavy crops of forage for soiling or hay in just thirteen months.

For spring planting to follow the peas and oats as a feed you could not get any thing better than some early quick-growing corn. Plant as early as the ground will permit. This will be mature enough to feed when the oats and peas are cut.

Then later as the soil warms up plant late sweet corn such as Stowell's Evergreen or Mammoth Sugar, and also a lot of sorghum and cowpeas, and that makes an abundant supply of excellent feed during the late summer and autumn months. The late planting of corn and sorghum and cow peas can be made on the ground from which the rye or wheat are removed, thus cutting two crops the same season in time to seed in the fall again.

Canada Field Peas—When sown alone or with oats they have long been recognized as one of the best feeding and fattening forage crops for young stock and hogs, to carry them during the midsummer and droughty period of July and August.

When sown alone they should be handled the same as any small grain crop and drilled at the rate of two and one-half bushels per acre. When mixed with oats one-half the quantity, namely, one and one-quarter bushels per acre, to the same quantity of oats is sufficient. The time of sowing corresponds with that of oat seeding. As peas are naturally hardy and not endangered by late frosts, the earlier the crop can be gotten into the ground the better.

Early seeding brings the crop into maturity and ready for feeding before the hot days of July and August. A pea crop, if sown as soon in Spring as ground is ready to plow, may be ready for feeding as early as the twentieth to twenty-fifth of June. Usually, however, it is available the first half of July and is equal to corn and six weeks earlier.

The above variety of Canada Field Pea should not be confused with the Clay Pea or Whippoorwill Pea or the many other varieties of Cow Peas grown in the warmer sections of the South. The Canadian Field Pea does not thrive in extremely hot weather but if sown early will produce good and bountiful crops wherever the conditions are also favorable for the growing of oats.

Cow Peas—The Southern cow pea (in reality a bean), has been cultivated in the South for many years, but only in recent years has it been demonstrated that most all varieties are adapted to cultivation throughout the entire United States. They now promise to become one of our most valuable farm products.

The yield of hay runs from 1 to 3 tons per acre. The Rhode Island experiment station reporting one year a yield per acre of 35,000 pounds green vines, making 5½ tons dried hay. The yield of peas range from 15 to 30 bushels per acre, occasionally as high as 50 bushels.

They have been grown by dairymen with very satisfactory results, following winter rye, which was cut green in June for dairy cows, then stubble turned under and sown to mixed peas and oats, furnishing a large amount of forage in August when grass pasture is usually short, and producing a supply of milk as abundant as in early summer months.

As a fertilizer they come next to clover, to be plowed under when they commence to blossom; they will grow on land that will not produce clover.

As a fertilizer crop it excels all others, absorbing from the air more nitrogen than clover, and drawing from the subsoil large amounts of potash and phosphoric acid, depositing these fertilizer elements in the surface soil, just where needed for succeeding crops.

Cow peas afford excellent midsummer pasturage, but the best way for using green is to cut and feed to stock. Sow 1½ to 2 bushels per acre broadcast.

Black—A standard trailing variety; and very extensively grown. Very prolific; early to mature; somewhat later than Whippoorwill. Makes a fine growth of foliage; and gives a good yield of peas, consequently better for cutting and as a soil improver. Very valuable as a forage crop, making an enormous yield of rich nutritious feed.

Black-Eye—(**Black-eyed Susan, or Sand Pea**)—Later than Whippoorwill. Vines erect. Fodder long. An excellent soil improver. Similar in growth of vine and action of roots upon the soil as the other Cow Peas.

Clay—Vigorous in growth of vine. Pods and vine somewhat similar to **Black,** but matures later. Very prolific in growth of Peas and vine. Color of seed a light brown.

Mixed Cow Peas—These consist of a mixture mainly of Clay, Black, and Whippoorwill. Mixtures are preferred by some, because they grow thicker and produce a better crop of vine and forage, than by sowing single varieties alone. Can be profitably used for soiling or hay.

New Era—Upright in growth, quicker to mature than Whippoorwill, prolific in Peas. The vines make a large growth, cure easily, and make fine, dry forage. The seeds are of a dull red color, and, being smaller than Whippoorwill and the ordinary Cow Peas, less seed is required to sow an acre, 1 to 1½ bushels being ample.

Red Ripper—Red seeded; a very desirable and productive variety. Resembles the Black in growth of vine, but is ten days earlier, and more prolific.

Whippoorwill—An early erect growing bunch variety. The seed is brown speckled and more easily gathered than from the vine-growing sorts. Early in maturity and habit of growth. Good between corn.

(*See also Canada Peas, page 8.*)

Dwarf Essex Rape—This plant is extensively grown for forage, especially for sheep and for green manure, for which purpose there is perhaps no better plant adapted where a quick rank growth is desired. Rape seed may be broadcasted, and it may be seeded in the corn field when the corn is "laid by." Rape is revolutionizing the sheep industry in this country, and it is also excellent for hogs and all kinds of poultry. It will be an advantage to test it on a small plot this year. Farmers who raise much stock and desire to get young cattle, sheep or lambs into favorable condition to be sold advantageously in the fall can do it most cheaply by growing this rape. Prepare the ground as for

turnips and sow in June or July, with a turnip drill, in rows 2½ feet apart, at the rate of 3 pounds of seed per acre, or broadcast at the rate of 6 pounds to the acre. An acre of rape will be ready to pasture in six weeks from time of sowing and will carry 12 to 15 sheep six weeks to two months. Its fattening properties are probably twice as great as those of clover. When sheep are feeding on rape they should at all times have access to salt. Our stock is the true Essex Dwarf, and not the worthless annual.

Kaffir Corn—Grows erect to a height of four and one-half to six feet, with thick, short, pointed stalks, bearing broad, deep-green leaves. Heads are compact, averaging 10 to 15 inches in length. Yields two crops of fodder during the season, which can be fed either green or dried. Is an excellent feed in combination with other feed such as Alfalfa, Beans, etc. The seeds are valuable for feeding poultry. Cultivate same as corn. Five pounds seed per acre. For fodder one to one and one-half bushels per acre either broadcast or drilled.

Soja Bean—Well adapted for improving poor soils. Is an immense yielder of excellent fodder relished by all cattle. Sow May 15th to June 15th. One-half bushel per acre in drills two and one-half feet apart.

Spring Rye—This article has proved itself a good cropper and straw producer. It has come to stay. The growth is as tall as the winter variety. It requires 1¾ to 2 bushels per acre, and the seed product being 20 to 25 bushels per acre. A great many people use it in preference to winter rye, and think it pays better than oats. Distinct from the winter rye, grain of finer quality and more productive; and can be successfully grown in any latitude. It is now being largely sown in the north in the place of oats, being a more profitable crop on account of the production of nearly four times the straw.

Winter Rye—This is one of the most important of farm crops. In the first place it is a sure crop, failures being almost unknown. Every farmer should have at least a few acres of it. It is usually sown in the Fall, and as it grows very vigorously, will furnish pasture till late in the Fall, and also early in the Spring, before other grasses have made a growth. So it is of great value to dairy farmers. If sown early in the Spring it makes an early and abundant pasture, but it makes no grain crop. Grown for the grain alone it will yield good returns. It is a good Spring soiling crop, giving the earliest bite of green stuff, makes fair hay if cut in bloom or before fully headed out. Useful also for a manuring crop if turned under in early Spring. Rye improves worn-out soils. Sow at last working of Corn, or by itself from July to November at the rate of 1¾ to 2 bushels per acre.

Spring Vetch (*vicia Sativa*)—Culture same as for peas. Valuable as a cover crop. Sow 2 bushels per acre. It is quicker in growth than Winter Vetch, and makes a splendid forage and hay crop, and is an excellent soil improver. When sown with barley or oats, use 1 bushel to 30 lbs. Spring Vetch to the acre.

Winter Vetch (*Vicia Villosa, Sand or Hairy Vetch*)—Sand-Vetch is a very valuable forage plant and is rapidly becoming extremely popular as year after year the farmers of this country are learning more of its true value. It is noted for its extreme hardiness, is highly valuable in the north as a winter cover crop to prevent leaching, is also valuable for forage and fertilizing purposes. It withstands hard winters, being hardier than wheat. It is an annual, but drops its seed freely and will come up year after year on the same ground. It belongs to the pea family but the vines are nearly twice as long and leafy as peas. It may be sown in the Spring or Fall with any crop of grain. It remains green all winter and is valuable for early pasturing as well as for fertilizing. It is extremely early and has enormous value for feedding purposes. Drought, heat and cold do not affect it. It is eagerly eaten by all kinds of stock. The Washington Department of Agriculture estimates the value of an acre of this Vetch plowed under as equivalent to putting into

the ground twenty to forty dollars worth of commercial fertilizer. When sown in August or September it covers the ground before Winter sets in and prevents washing of the soil during Winter and early Spring, which saves a great portion of mineral fertilizers contained in the soil which otherwise would wash out. When sown in April or early May it can be cut in July, the second growth affording excellent pasture during the summer. The yield of green forage runs from twelve to twenty tons per acre. When preparing the soil for vetches the pulverization should be very fine. The land should be clean, firm and moist and the seed covered to the usual depth of cereal grains. It is suited to any soil and is valuable in this respect as it produces good crops on poor, sandy soil, while on good land it grows to a height of four or five feet and produces enormous crops. Every farmer in the United States who raises any stock should have a field of it as it is much more nutritious than clover and can be fed to any kind of stock with perfect safety. It is a rapid grower and thrives on little moisture. If raised for hay it should be left standing until some seeds have become well formed. It requires about 30 lbs. per acre broadcast.

Turnips as Green Manure—The Turnip is coming to the front as an individual of importance in the economies of nature, and is destined to be used extensively as a soil enricher. Three to four pounds of seed of the long rooted Cow-horn, or Purple Top variety, per acre, sown broadcast at the last working of your corn, will send their roots down to a great depth and bring up a vast amount of fertility from below the reach of many other plants, and whether fed off or plowed under in the late fall the ground will be found in a much better condition mechanically, as well as with an actual increase of fertility for the succeeding Spring crop. If to be left until Spring before plowing, a mixture of crimson clover and turnips will be found to work well together, the decaying turnips feeding the clover bountifully in early Spring. Follow with oats next Spring, wheat in September, and sow mammoth red clover on the wheat the following Spring. We believe land so managed will give good crops and yet continually increase in fertility instead of running down.

POULTRY AND PIGEON FEED

Mixed Pigeon Feed—A specially-prepared and uniform mixture of our own, containing all the most desirable feeding grains in proper proportion; keeping the birds in good condition and free from the common ailments resulting from feeding badly proportioned, wormy, dusty or fermented grains. Ask for Mingle's mixture and you will use no other in future.

Short Cut Alfalfa—An excellent and invigorating green food for fowls, very easily digested, and calculated to keep them in fine condition. Our preparation is specially recleaned from all foreign matter before being cut to edible size.

Sunflower (*Mammoth Russian*)—It is grown for its seeds, which are valuable food for stock, particularly large poultry; also for parrots. Is considered the best egg-producing food known. Poultry eat it greedily, fatten on it, obtain a bright, lustrous plumage, and strong, healthy condition that fully illustrates the wonderful benefits from its use. Grows 6 feet high and can be raised as cheaply as corn, having yielded at the rate of 120 bushels per acre. Single heads measure from 12 to 22 inches across, and contain an immense quantity of seed. Can be sown at any time up to the middle of July.

Buckwheat (*Japanese*)—This variety of Buckwheat is a great improvement over the old kind in the following respects: The new Japanese grows with astonishing vigor and begins to mature its grains in about fifty days, its extreme earliness insuring safety from frosts, where the other kinds often get caught. 2d. A most valuable quality is its ability to withstand wind-storms and not lodge. 3d. It holds its grain in harvesting.

It has been known to stand uncut a month after its proper time for ripening, and without apparent loss from lodging or grains separating. 4th. In yield it excels. We have reports of one peck yielding 36 bushels; another peck 40 bushels; another 52 bushels. Its flour is the whitest and finest of all buckwheat. 5th. It will do well on soil too rich or too poor to support the old varieties. 6th. It will withstand sunblight almost perfectly. Fields of the old buckwheat average less than four bushels per acre, while the sun had no effect on Japanese.

Canada Peas—Most preferable for feeding pigeons, being perfectly round and very small. They are also used for fodder; when sown in oats and cut green they become very nutritious.

Bird Millet—Best imported seed. Large size, bright colored grain. Scattered in fine litter it "provides" more exercise than any other grain food, making the "wee wee babies" get right down to hard work to get their "daily bread."

Sorghum—A patch of sorghum planted where the fowls can have access to it, and a few heads bent down so they can get the seed will furnish food for them during late summer and early fall. I have seen fowls so fat on this food that they could hardly be eaten, yet they produced great numbers of eggs.

Ground Charcoal—Excellent for young and old chicks; should be kept constantly in reach of small chicks. Prevents diarrhœa, if fed once or twice a week.

Prepared Oyster Shell—Manufactured from shells in a pure condition. The lime contained in the shells assists in the formation of the egg, and contributes to the general health of the fowls. A handful to five fowls daily will be found valuable at all seasons of the year. We have three sizes, coarse, medium, and fine.

Mica Crystal or Grit—To aid digestion it is necessary to feed some gritty material. Mica Crystal supplies this want better than any other article known. We supply this in three grades, fine, for small chicks and birds, medium and coarse for larger fowls.

We also carry in large quantities:—Hemp, Rape, Canary, Silver Hull and Japanese Buckwheat, Barley, Prepared Chicken Feed, Kaffir Corn, Cracked Corn, Whole Corn, Scratch Feed, Developing Feed, Cut Alfalfa, Poultry Meat, Mash Feed and Wheat for Feeding. **See price list pages 47 and 48.**

Prices on application.

COWS AND GREEN CORN

Many dairy farmers not far from town will find it a paying venture to put in quite a lot of sweet corn, getting in some on especially early warm soil. By having an early start and getting a good trade fixed you can hold it through the season. As soon as the marketable ears are picked the stalks and small ears make excellent cow fodder and come on at just about the time the pastures begin to be short. You will want a succession for this, and we have found the following varieties to work well: Shaker's Early, Evergreen and Country Gentleman. These cover a wide period. Varieties with larger ears will sell for one time better perhaps, but large kerneled corn is not usually of as good quality. Some have spoiled their trade by picking too long on one variety until the corn was hard and tough, and one meal of this kind stops the corn eating habit for some time. The fodder will pay the cost of raising the corn, and all sold is nearly clean profit. We have known some

growers who supply grocers on contract, the grocer or marketman to use only their corn, and they to take daily unsold ears, which are used for feeding. This means that the consumer gets fresh corn every time, the grocer has no loss, and a better demand for corn comes to the grower.

FEEDING ROOT CROPS

Be Kind To Your Stock.—It will pay you. Farm lands in the United States are rapidly rising in value and the more intensive methods of Europe must be adopted here. With cheap corn in plenty, stockmen have felt satisfied. The more careful investigators of our experiment stations have, however, demonstrated that dry feed alone is highly wasteful. That it is not what an animal eats but what it **digests** and **assimilates,** that is of benefit to the owner. That comfort, care and change of food are also important. When fed on a ration containing something **green** or **fresh,** appetite is stimulated; the digestion is more perfect (through the laxative character of the fresh portion) and the general health and restful content greater.

The value of Mangels for stock feeding cannot be over-estimated.—The results from their use are clearly seen in the improved health and condition of animals, the increased flow and quality of milk from cows, and the saving in fodder. Mangels yield enormously if the soil is rich and can be grown at trifling cost. **Everyone who keeps even one cow should grow a patch of mangels for winter feed.**

Culture.—Both Mangels and Sugar Beets require deep, well enriched soil. Sow in May or June in rows eighteen inches to two feet apart, and three to eight inches in the rows. Young plants may be transplanted to fill up vacancies. As soon as frost occurs, dig the crop.

ENSILAGE

A silo is simply a receptacle for ensilage. It may be of any preferred breadth or depth, but should be strong and tight. It may be constructed of concrete, stone or heavy boards, either above or below the ground, and may be of round or square shape. Ensilage is green vegetable matter, finely cut and packed closely in the silo by heavy pressure, so as to exclude the air. It is the exclusion of the air that prevents excessive fermentation and decay. Clover, green grass, vegetable tops or any green substance may be used, but the cheapest ensilage is that secured by drilling corn in rows, cutting the stalks when the ears are beginning to glaze, passing them through the ensilage cutter (or cutter and shredder) and filling the silo as quickly as possible. The ensilage is fed to cattle in winter as a substitute for green food, being really preserved green corn fodder.

Cut the green corn for the making of ensilage as close to the root as possible, taking, if possible, even part of the latter, and use every part of the stalk from the root to the tassel. Nothing is thrown away. The corn is then hauled to a silo, it is reduced to pieces of from one-half to three-eighths of an inch. The silo is filled to its utmost capacity, the opening and door being closed tight, and the chopped corn remains in it for a month before we use it. We usually fill the silo in September and begin to use the ensilage in the following month, continuing to feed the cows with it until the middle of May, when they are turned into pasture for the summer.

Its General Use.—The chopped corn in the silo ferments, the temperature in this specially constructed building rising as high as 160 degrees, and ensilage is the result. It makes excellent fodder and is now being used altogether by enterprising and up-to-date farmers throughout the country. Silos are being built all over the country, hundreds of them, going up in sections where farmers are just beginning to realize the value of this prepared fodder. Ensilage will keep in a silo for a year.

USEFUL HINTS

There are several crops that can be made to do service, not only in covering the land, but in destroying weeds. Millet, which grows rapidly, crowds the weeds out, while Hungarian grass, which may be mowed two or three times and then plowed under, is the best cleaner of the soil of weeds that can be used. Buckwheat is a crop that will grow on the poorest sandy soil, and even if corn or oats are broadcasted and turned under when high enough they will be serviceable. While the cow pea may be regarded as the best crop for adding nitrogen to the soil in summer, there is nothing to prevent the growing of two crops on the same land for enriching the soil, as it may not be necessary for such crops to mature. They can be turned under at any stage of growth. It is maintained that the crops can add nothing to the soil other than the amount derived therefrom. This claim is true as far as the mineral elements are concerned, but there is a decided gain of nitrogen by the use of the leguminous plants. As the soil contains a large proportion of inert mineral matter, the plants gradually change it to an available condition and, though not adding mineral matter to the soil, they bring it within reach of succeeding crops. In winter the soil loses its fertility rapidly, especially if there is frequent freezing and thawing, with abundant rain, for which reason rye or crimson clover serve to prevent loss. It will, therefore, pay the farmers to grow crops on every square foot of ground, as they will be serviceable on the land if not profitable for market.

Examine Your Stock of Garden Seeds—This is an excellent time to examine the garden seeds, especially peas, which are liable to attack by weevil. Put the seeds in a box, pour a spoonful or two of bisulphide of carbon, close the lid and in fifteen minutes the pests will be destroyed and the seeds uninjured.

Then replenish your stock from P. B. Mingle Co.

Don't Grow Weeds—In some localities low grades of clover seed are demanded because the clover is to be used as green manure, and it is thought that the weeds will furnish green material for plowing under and can thus do no harm. This is true to a certain extent, but the weeds fall far short of the clover as green manure, and the value of the sod will be reduced in proportion to the abundance of weeds.

It is poor economy to pay for weed seeds and to allow them to occupy the ground at a saving of 25 to 50 cents on the acre for seed. Moreover, when a sample of clover seed is very foul it nearly always contains large quantities of the seeds of the worst weeds, such as sorrel, buckhorn, plantain, and sometimes dodder. The seeds of dodder are, fortunately not yet common in American clover seed, and are rare in well-cleaned, home grown seeds, but the danger of the spread of this pest should not be underrated. It is not the fault of the seed purchased from your storekeeper or seedsman (if you get the best recleaned) that causes the growth of weeds in your field. We have the machinery for recleaning seed and taking out foul stuff, and when the best seed is asked for you may rely upon it that the quality is not only the best we have, but the best that can be gotten, and is as free from foul weeds as machinery can make it.

HAMMOND'S SLUG-SHOT

Hammond's Slug-Shot is now sold by leading seedsmen. Costs one-quarter as much as Paris green or London purple, and is far better than either for destruction of potato bugs. We sell thousands of pounds to regular customers every year.

It positively *destroys* the bugs, old or young; *it will not hurt you* nor your plants. In using it *a light dusting* is just as good as loading down the plants, so far as destroying the bugs is concerned.

Guaranteed to destroy potato bugs, and those on tomatoes and egg-plants, currant worms, cabbage lice and worms, fleas, beetles and striped bugs on melons, turnips, beets, onions, etc., also a preventive of the rosebug and cut-worm. Use in the morning while the dew is on; dust on dry. Slug-Shot is put up in 5-pound packages, 25 cents each

BUG DEATH

Pat. March 16 and Nov. 9, 1897.

Is a very fine powder, so exceptionally tenacious that it does not wash off. If used when the tender shoots come from the ground you never will be bothered, but even if the bugs and worms have got the upper hand, it is not too late by any means to use Bug Death right now, for it will kill any bug or worm that eats the leaf, blossom, or flower of any plant. It is ideal for use on Potato, Squash, Cucumber, Currant, Gooseberry and Tomato plants and vines; for house plants and "that little vegetable garden" it is unexcelled.

It contains no Arsenic nor Arsenical poison of any name or nature. Does not harm birds, animals, or foliage, no matter how freely it is applied. In addition to killing the bugs or worms, and preventing blight it nourishes the plant, as the healthy leaf absorbs moisture and carbon from the air.

1-lb. cans, 15c. 3-lb. pkgs., 35c. 5-lb. pkgs., 50c.

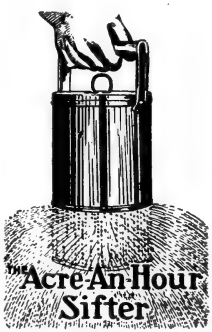
DICKEY'S TUBULAR BUG DEATH DUSTER

Is especially handy and effective for small vegetable or house gardens, for applying any insect powder in dry form.

Price, 25c. each.

ONE-ACRE-AN-HOUR SIFTER

This is an ideal sifter for applying Bug Death dry. It is of the very latest pattern, remarkably effective and distinctly economical. Easy to operate, and gives quick covering to all plants and vines requiring a top application. The price of this very useful implement is 60 cents.



DOG FOODS

Spratt's Patent Meat Fibrine Vegetable Dog Biscuits—The standard dog food. Used at the leading kennels and dog shows throughout the world. A staple and constant food for all breeds of dogs.

25 lbs. $1.75; 3 lbs. 25 cents; per lb. 10 cents.

Spratt's Patent Puppy Biscuits—The standard puppy food. A perfect and whole food for puppies of all breeds. Puppies should be started on these biscuits when about a month old, and then should be continued until such time as their teeth become sound and strong, usually when they are about six months old.

25 lbs. $1.75; 3 lbs. 25 cents. per lb. 10 cents.

A price list of special publications of interest to owners of pets of the canine and feline species will be mailed upon application.

ILLUSTRATED CATALOGUE

— OF —

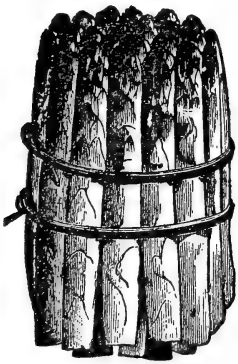
VEGETABLE SEEDS

With General Directions for Cultivation

For quantities required per acre see table, third page of cover, and prices, pages 43 to 48, Terms of sale 2nd page of cover.

ASPARAGUS

CULTURE—Soak the seed twenty-four hours in warm water, and sow in drills, one foot apart. When the plants are well up, thin to three or four inches in the row, and give frequent and thorough cultivation during the summer. The second season prepare a bed by deep spading or trenching, working in a large quantity of well rotted manure. Dig trenches four feet apart and twelve to sixteen inches deep, and spade in at least four inches of well rotted manure in the bottom. Set the plants in the trench eighteen inches apart, covering them with about two inches of fine soil. After the plants are up, gradually fill up the trenches, and give frequent and thorough cultivation. The second season, early in the spring, spade in a heavy dressing of manure and about two quarts of salt to the square rod. Cultivate well. The next season it may be cut for the table two or three times, taking care to cut all as fast as it appears. After the final cutting, spade in a liberal dressing of fine manure and sow one quart of salt to the square rod. The next season, and ever after that the bed should give a full crop, but should be annually manured after the last cutting and well cultivated through the remainder of the summer. The tops should not be cut until dead ripe.



Conover's Colossal

Conover's Colossal—A mammoth variety of vigorous growth, sending up from fifteen to forty sprouts from one to two inches in diameter. Color deep green, and crown very close.

Asparagus Roots.—Conover's Colossal.
Palmetto.

BEANS—Dwarf, Bush or Snap

CULTURE—Beans do best on light, warm soils, but will do well on almost any kind of soil. They do not require heavy manuring. For earliest crop they should be planted after all danger of freezing is past. For a succession they should be planted every two weeks. Plant two or three inches apart, in rows two and one-half feet apart. Hoe often, but never when vines are wet.

GREEN-PODDED VARIETIES

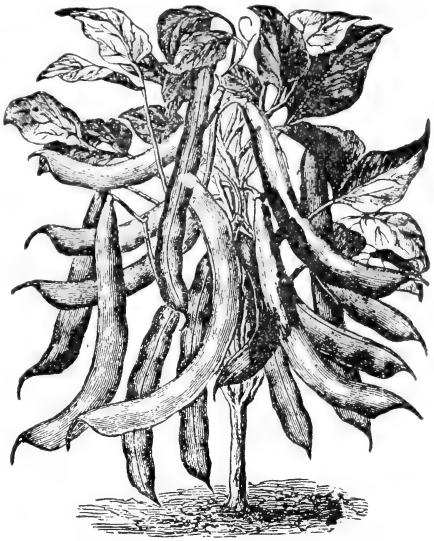
Late Refugee, or Thousand to One.—Forty days—Vines dwarf, large spreading, exceedingly hardy, with small, smooth leaves and large lilac flowers, very late, and esteemed for late planting and for use as pickles; pods long cylindrical, green, becoming white, streaked with purple, of good quality as snaps; beans long, light-drab, dotted and splashed with purple.

J. & S. Giant Valentine Stringless.—Earlier than Valentine. Pods much longer, round and stringless.

Black Valentine.—A desirable sort for the market gardener, vigorous in growth, and of good quality. Pod long, round and slender.

Burpee's Stringless Green Pod.—Thirty days—Early and very productive with fine pods, of best quality. Should be planted at intervals for a succession. Pods medium green, straight and round, tender, brittle, and of fine flavor.

Extra Early Red Valentine.—Thirty-two days—Pods light, green, round, and slightly curved; very prolific, stringless.



Extra Early Red Valentine

Early Long Yellow Six Weeks.—Thirty days—A green podded, yellow-seeded sort. Pods flat, tender and long.

Longfellow.—Bears long green pods in profusion. Pods are of fine flavor and very tender, straight and fleshy.

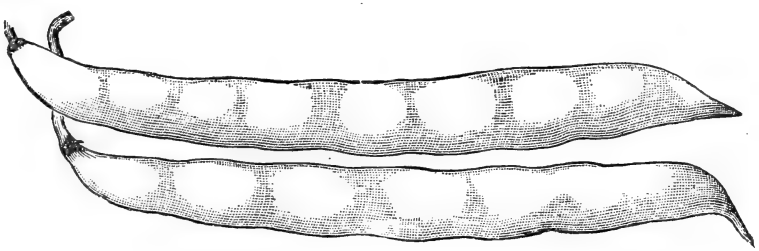
Round Yellow Six Weeks.—One of the best green pod Beans, while this variety does not differ from the Early Kidney Six Weeks in size or general appearance of the vine, the pods are shorter, very much thicker, more fleshy, while retaining the vigor and hardiness of the old sort, it is fully one week earlier. Dry Bean, color of ordinary six weeks, but it is much shorter, almost round.

Royal Dwarf White Kidney.—Forty days—One of the best late kinds; seed white, kidney-shaped; as a winter bean for shelling it has no superior.

Large White Marrow.—Excellent quality, either shelled green or dry.

Dwarf, White Navy.—Seeds small, round and oval, used exclusively for field culture.

WAX PODS



Golden Wax

Golden Wax Bean.—35 days—This bean has long been and still continues the standard wax variety for general use, and where many varieties have been introduced claiming to be superior in some respects and aiming to replace it, they have all sooner or later been forced to the rear as not possessing as many good qualities in as high degree. Vines medium size, erect, moderately spreading, hardy and productive, with small, smooth

leaves, and small white blossoms, pods are long, nearly straight, broad, flat, golden yellow, very fleshy and wax-like, with short, fleshy, green point, cooking quickly as snaps shelling well when green, and of the highest quality in both conditions. Beans medium size, oval, white, more or less covered with two shades of purple red.

Wardwell's Kidney Wax.—The vines of this variety are very large, strong growing, but are peculiarly liable to blight, but when healthy, yield a large crop of long, nearly straight, handsome, very white and wax-like pod. They are of good quality and on this account, as well as their beauty of form and color, are easily sold. They ripen about the same time as the Golden Wax. The dry beans are large, kidney-shaped, white with dark markings about the eye. Market gardeners find this a profitable variety owing to the large size and handsome color of the pods.

Round Pod Kidney Wax.—An improvement on Wardwell's Kidney Wax. Pods long and straight, a heavy bearer of good quality.

Davis' Kidney Wax.—Pods large and showy, about 5 inches long, flat, wide and straight; seed white, kidney-shaped and plant upright, height 14 inches.

Currie's Rust Proof Wax.—This variety is claimed to be absolutely rust proof, and is as nearly rust proof as any good wax podded bean can be, vine vigorous and productive, about the same as Kidney Wax. Dry beans bluish-black.

Dwarf German Wax Black Seeded.—40 days—Pods medium length, borne well up among the foliage, curved, cylindrical, thick, fleshy, and of a clear, waxy-white color, with long, slightly curved point; remain a long time in condition for use as snaps. Beans small, oblong, jet black. Vines medium sized, very vigorous and hardy, withstanding rust exceedingly well. Flowers reddish white or purple.

BEANS—Pole or Running

CULTURE.—These are even more sensitive to cold and wet, as well as to drought and hot winds, than the dwarf varieties. After settled warm weather, set poles four to eight feet long in rows north and south four feet apart, the poles being three feet apart in the row, and set leaning to the north at an angle of 35 degrees. Set in this way, the vines climb better, bear earlier, and the pods are straighter and more easily seen. Around each hill plant five to eight beans, two inches deep. When well started, thin to four plants and start any that fail to climb, around the pole in the same way as the others, for they will not grow well otherwise. 1 qt. to 100 hills.

White Dutch Case Knife.—75 days—The earliest variety of Pole Bean, excellent flavor, and good green or dry; seed broad, white, flat; can be used as a Snapshort or Lima when dry.

Kentucky Wonder.—One of the earliest of the green podded pole beans; pods growing in clusters, light green in color, and stringless, tender and melting when cooked.

Horticultural.—80 days—The favorite, used green or dry. The dry beans are very superior for cooking.

White Crease Back.—45 days—Extremely early, very popular in the South; seed small, white, kidney-shaped, long, pods green.

Lazywife.—A very productive sort, of fine quality. Pods are thick, broad, and fleshy, about 5 inches long, growing in clusters, stringless when young. The dry beans are white, and used as a shell bean in winter.

Red Speckled Cut-Short, or Corn-field Beans—An old variety of Snap Bean, very popular for planting among Corn; vines medium, pods short, round, tender and uniform, beans white, with reddish brown dots, and nearly oblong, resembling the Bush Valentine.

POLE LIMA BEANS

Improved Extra Jersey Lima.—90 days—Very superior quality, white seed much larger than the ordinary Lima, of greenish tinge; tender and sweet.

Salem Improved Large Lima.—90 days—A favorite table variety, very prolific; pods borne in clusters, with 5 or 6 large beans to the pod. Far superior to other Pole Limas. Ripens early and bears until frost.

Dreer's Pole Lima.—Early and more prolific than Large Lima. Beans, small, extra quality.

Shotwell's Improved Thick Pole Lima—A well known favorite introduced from New Jersey. Beans thick and large. A decided improvement on Dreer's Improved Lima in quality, earliness, and productiveness. Highly recommended by all who have tried it.

King of the Garden Lima.—One of the best pole beans for use, shelled either green or dry.

Challenger Lima—A very productive sort maturing somewhat later than the flat varieties. The pods are produced in clusters and average 3 to 4 inches in length, containing 3 to 5 thick beans which crowd each other in the pods.

BUSH LIMA BEANS

Dreer's Bush Lima.—A vigorous bush Lima, growing about 2 feet high; very prolific in pods; an average of four thick sweet beans in each pod.

Burpee's Improved Bush Lima.—A sort distinct from Burpee's Bush Lima in that it is about ten to fifteen days earlier, bears much larger and thicker pods, and larger greenish white beans than Burpee's Bush Lima. The plants are vigorous, with heavy foliage and are about 2 feet high and of upright growth. The yield is about one-third more, and the beans of a luscious flavor.

Burpees' Bush Lima.—Vine about 20 inches high, erect and vigorous in growth; very prolific in large green pods, filled with large white beans.

Fordhook Bush Lima—An erect growing Bush variety, double the size of Dreer's Bush Lima. Pods borne in clusters of 4 to 8 beans per pod.

BEET

All the varieties succeed best on a deep, rich, sandy loam. For early beets, sow as soon as the ground will admit, in drills fourteen inches apart, and thin to six inches in the row. For winter, sow about the middle of spring. Soak the seed twenty-four hours in luke-warm water before planting, and sow in freshly prepared ground.

The Sugar and Mangel Wurzel varieties are grown for feeding stock and should be sown from April to June in drills two feet apart, and afterwards thinned out to stand one foot apart in the rows; keep them well cultivated and you will have an abundant crop.

Crosby's Egyptian

Extra Early Bassano.—45 days—This is the largest of the Earliest varieties, and reaches a size fit for the table among the first; will not keep well during the winter. Flesh coarse grained, but tender and sweet.

Crosby's Egyptian Blood Turnip.—40 days—This matures quicker than any other sort. Roots of fine form, medium size, smooth and dark in color, flesh dark red, fine grained, crisp and tender.

Eclipse.—A globular crimson sort of very rapid growth. Bright red in color, and of fine flavor. A great improvement on its parent, the Egyptian.

Early Blood Turnip.—Tops small, roots blood red, turnip shaped and very tender.

Bastian's Early Turnip.—One of the best for the market gardener or for family use, early, quick growth, good shape, and bright red color.

Half Long Blood.—60 days—One of the very best, unsurpassed for its winter keeping qualities.

Improved Long Dark Blood.—62 days—The best winter variety, but apt to be tough when sown too early.

Swiss Chard or Silver Beet.—Forms tops only, used for Greens.

White Silesian Sugar.—65 days—Grown extensively for feeding stock; also for extraction of sugar.

Imperial White Sugar.—70 days—A greatly improved variety of the White Silesian.

Half Long Blood, Queen of the Blacks.—A favorite half long early market and winter sort, equalling and frequently surpassing the Egyptian. Uniform in quality, and a good keeper, symmetrical in form, and a handsome table beet.

CATTLE BEETS

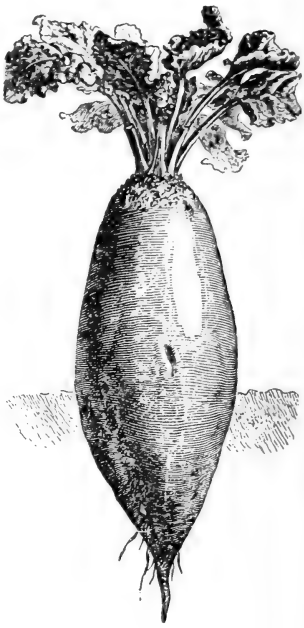
Giant Long Red Mangel Wurzel.—120 days—Very large, growing well out of the ground, top small for its size, straight, smooth, and of a fine scarlet color.

Long Red Mangel Wurzel.—A large, long variety, for stock feeding, color light red.

Golden Tankard.—Large, round, orange colored variety, of excellent quality, which keeps better than the long red, producing better crops on shallow soil.

Yellow Globe.—Is a heavy cropper, of immense size, good shape and small top. Excellent for feeding and succeeds well on any soil.

Red Globe Mangel Wurzel—Similar to Yellow Globe, except in color, which is light red or pink.



Long Red Mangel Wurzel Beet

BRUSSELS SPROUTS

This is a very desirable vegetable, though very little known in this country. It grows two or three feet high and produces from the sides of the stalk numerous little sprouts somewhat resembling cabbages; they are used for Fall and Winter Greens. It can only be grown to perfection in a good soil and with a long season to complete its growth. The seed should be sown in March or April, in a frame and the plants transplanted into the open ground and cultivated as cabbage. The plants should be watered and shaded for a week or ten days to give them a good start.

CABBAGE

There is no vegetable which may be cultivated with more certainty of success than this, and few if any that are so generally useful, as it may be made to follow other crops, and will give some return, no matter how poor the soil nor how negligent the cultivation, while it responds so readily to better care, that it claims a place in the finest garden, and the attention of the most skillful gardener.

The requisites for complete success First, good seed; there is no vegetable where the seed has more influence on the quality of the product than this, and the gardeners should invariably select the best procurable. Second, rich, well prepared ground. Third, frequent and thorough cultivation.

For Cabbages, the ground must be highly manured, deeply dug or ploughed, and thoroughly worked to insure good full sized heads. A heavy, moist and fresh loam is most suitable. The early sorts should be sown very early, in hot-beds, hardened off, and transplanted eighteen to twenty-four inches apart, early in the spring. In the south, sow from the middle of September to middle of October, and transplant into cold frames to preserve through winter, setting into open ground as early as possible. In transplanting, **they must be set in the ground up to the first leaf no matter how long the stem may be.**

The late autumn or winter varieties may be sown in a seed bed, from the middle to the last of spring, and transplanted when about six inches high, three feet apart each way. Shade and water the late sowings in dry weather to get them up. It is important that the plants should stand thinly in the seed bed, or they will run up weak and slender, and be likely to make long stems. Cultivate frequently throughout the season.

Cabbage should be hoed every week, and the ground stirred deeper as they advance in growth, drawing up a little earth to the plants each time, until they begin to head, when they should be well dug between and hilled up. After they are partly headed, it is the practice of some gardeners to lay them over on one side. Loosening the roots will sometimes retard the bursting of full grown heads.

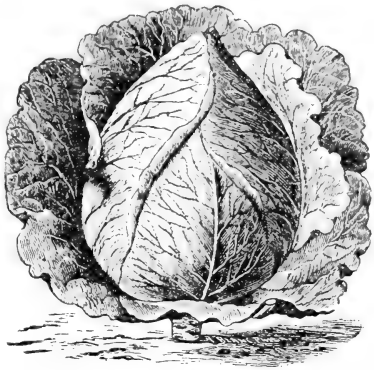
To preserve cabbages during the winter, pull them on a dry day, and then turn them over on the heads a few hours to drain. Set them out in a cold cellar, or bury them with the head downwards, in long trenches, in a dry situation. In the Middle States, bury the head and part of the stem in the open ground, and place over them a light covering of straw and boards to protect them in severe weather.

FIRST EARLY

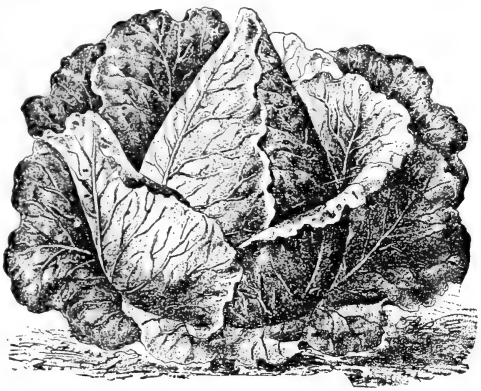
Early Jersey Wakefield.—Heads very compact, of medium size, varying from nearly round to conical. An early, sure heading sort, very popular with eastern market gardeners.

Early York.—Heads small, heart-shaped, firm and tender; of very dwarf growth, and may be transplanted fifteen or eighteen inches apart.

Early Large York.—Succeeds the Early York, and is equally desirable. It is of large size, about ten days later, more robust, and bears the heat better.



Early Jersey Wakefield



Early Winnigstadt

SECOND EARLY

Early Winnigstadt.—One of the best for general use, being a sure header, and will grow a hard head under circumstances where most sorts would fail. Heads of regular conical shape, very hard, and keep well winter and summer.

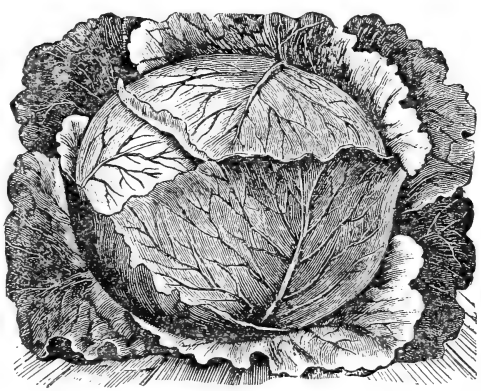
Early Dwarf Flat Dutch.—95 days—heads of medium size, solid, flat, grows low on stump, and is of good flavor.

Succession.—A second early round-headed sort—very popular with truckers. A week earlier than Early Summer.

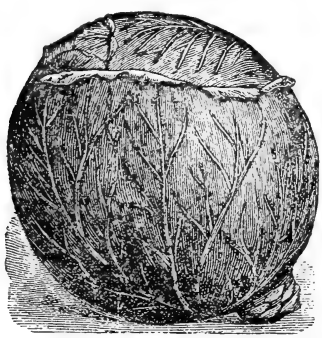
Early Summer.—Large, very solid, round, flattened and compact heads of excellent quality.

LATE

Premium Large Late Flat Dutch.—120 days—Superior to any late cabbage in cultivation. Our stock has been grown for us from carefully selected heads, and is equal to any other strain of this popular variety.



Premium Large Late Flat Dutch



Danish Ball Head

Premium Large Drumhead.—120 days—A large fall or winter variety, broad, flat or roundhead, short stump, tender and good flavored, and is an excellent keeper.

Danish Ball Head.—A medium-sized, round, hard-heading variety of Danish origin. Medium to late in maturing, making an excellent winter sort, and gaining favor among gardeners. Well worth trying.

Improved Drumhead Savoy.—The best of all Savoys for general market or home use. It has a short stump, grows to a large size, is compact and solid, and closely approaches the Cauliflower in delicacy and flavor.

Red Dutch, for Pickling.—An esteemed sort for pickling; it forms very hard, oblong heads, round at the top, and when pure, of a dark red or purple color.

CARROT

The Carrot succeeds best on a light sandy loam, made rich by manuring the previous year. In freshly manured land, the roots often grow prolonged and ill-shaped. It is better to sow as early in the spring as the ground can be made ready, but if planting is necessarily delayed until late in the season, soak the seed twenty-four hours in tepid water, dry by mixing in sifted ashes or plaster, and sow on freshly prepared soil.

Improved Long Orange

CULTURE.—Sow in drills to 24 inches apart, using from 4 to 5 pounds to the acre, according to the distance between the rows. It is necessary to sow carrots quite thickly, on account of the young plants not having sufficient strength to come through the ground when sown thinly. Cover one-fourth inch deep and see to it that the soil is well firmed about the seed. As soon as the plants appear use the cultivator or wheel hoe, and do not let the weeds get a start. Thin to 3 to 4 inches apart in the row as soon as plants are large enough. Gather and store for winter use like beets or turnips.

One ounce of seed will sow a row 100 feet long. Four to five pounds will sow an acre.

Orange Danvers Half Long

Orange Danvers Half Long.—65 days—Medium length, very large and heavy yielder, rich dark orange color, smooth and handsome.

Early Half Long Scarlet (Stump Root).—45 days—A popular early variety, medium size; flesh bright scarlet, brittle and of good flavor.

Improved Long Orange.—The well known standard; roots long, thickest near the crown, tapering regularly to a point, color deep orange. The best for field crop and table use.

Chantenay Half Long.—A very desirable variety. Smooth, short, thick, and stump rooted and of a rich orange color. Fine for the home garden.

CAULIFLOWER

CULTURE.—Sow for early use about middle September, in a bed of rich clean earth. In about four or five weeks afterwards the plants should be pricked out into another bed, at a distance of four inches from each other each way; these should be encompassed with garden frames, covered with glazed sashes, and boards or shutters. The beds must be so secured, and the tops of the beds so covered as to keep out all frosts, giving them light and air every mild day throughout the winter; transplant in April into a bed of the richest earth in the garden, at a distance of two feet and a half each way. Keep them well hoed, and bring the earth gradually up to the stems. The late variety matures in the autumn, and is sown and managed similarly to winter cabbage, but is not so certain to succeed in this climate.

Early White Snowball.—90 to 100 days. The most highly flavored variety grown, and always sure to head.

Lenormands.—Large, late, and short stemmed. Head swell formed. A superior variety.

Autumn Giant.—The best late variety; large well formed heads, extra quality, and the best late variety in cultivation.

CELERY

Sow the seed, which is very slow to come up, early in the spring, in rich, mellow ground, in a situation where it can be protected from the parching heat of the summer sun:

water freely in dry weather. When the plants are five or six inches high transplant a portion in trenches well manured; the dwarf varieties three feet and the tall four feet between the rows; plant six inches apart in the rows, pressing the earth to the plants. As they advance in growth blanch by earthing up, which should be performed gradually in fine weather, taking care not to bury the heart of the plants.

A light dressing of salt applied when earthing up, is beneficial.

Silver Giant White Solid

Silver Giant White Solid.—The very best tall growing variety, white, very solid, crisp, tender, and superior in flavor.

Boston Market.—The most popular variety is the Boston Market. It forms a cluster of heads, instead of a single large one, and is remarkably crisp and tender. A good variety for light soils.

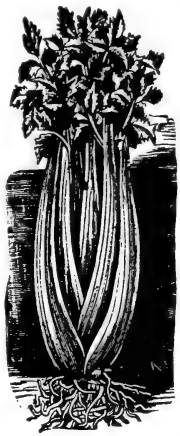
Dwarf Golden Heart.—Very fine; when blanched the heart is of a waxy golden yellow, rendering it a most striking and showy variety for either market or private use.

Half Dwarf White Solid.—Is of rather a yellowish white when blanched, and entirely solid, possessing the peculiar nutty flavor of the dwarf kinds, with more vigor of growth.

Dwarf White Solid.—Dwarf, white, of stiff close habit; solid, crisp, and juicy. Keeps in good order later in the season than any other variety.

Golden Self-Blanching.—A dwarf sort, with numerous heavy and solid stalks, easily blanched. Heart solid, and with the leaves of a beautiful golden yellow.

White Plume.—100 days—The stalks and heart are white, of good eating quality, crisp, solid, and of nutty flavor; is ornamental, resembling an ostrich feather.



Dwarf Golden Heart

Giant Paschal.—120 days—Is from the Golden self blanching variety, but is somewhat longer growing. About 2 feet, very hard, thick, and crisp, without any bitter flavor.

Celeriac, or Turnip Rooted.—The Root is cooked and sliced, used with vinegar; makes an excellent salad.

Soup, or Flavoring Celery.—Old seed for flavoring soups, stews, etc., not for sowing.

Early Minnesota Sugar

SUGAR CORN

Judging from the long and constantly increasing lists of corn which annually appear in the Catalogues issued by the various Seed Houses throughout the country, the reader would be led to believe that they were in innumerable variety, more especially amongst the Early sweet and other kinds for table use. This, however, is not the case, as upon testing, most of them will be found identical, and the long lists will dwindle down to a few pronounced and distinct varieties; in fact, the difference exists more in name than in anything else. We have, therefore, in the present Catalogue confined ourselves to those distinct and standard varieties, which the practical experience of market and family gardeners has decided to be the best for market and family use. Should other kinds appear which are really valuable they will be placed in stock, and we will gladly procure for our customers any varieties from other Catalogues which they may desire to test.

Corn should not be planted until the ground has become sufficiently warm, as cold and wet causes it to rot. Planted every two weeks, until the middle of July, will give a succession throughout the season.

First of All.—The very earliest grown for the Philadelphia market.

Extra Early Adams.—62 days—The old standard, early sort, and its earliness its principal recommendation. Not a pure sugar.

Early Minnesota Sugar.—New, and reported the best Early Sugar Corn grown.

Crosby Sugar.—This variety follows the Extra Earlies as one of the most valuable for an early crop. Its habit is dwarf, produces medium sized ears of from ten to twelve rows. Desirable in every way.

Hickox Early.—An Extra Early Sugar Corn, ears very large for an early variety, and said to be the earliest sugar corn known.

Black Mexican.—Matures early. Has a peculiar black and very sweet grain. Worth trying.

Early Evergreen.—A week or ten days earlier than Stowell's Evergreen, and of as good a quality.

Egyptian.—90 days—A new large variety, quite late; quality good, and resembles in some respects, the Evergreen

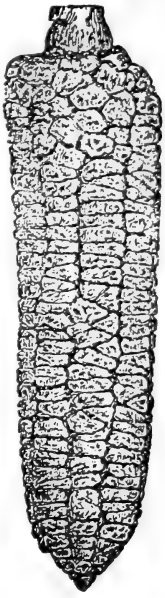
Early Shaker Sugar.—Introduced by us to the Philadelphia market many years ago; grows fine long ears for an early variety, and is unsurpassed by any of the other early kinds.

Early Shaker

Kendel's Early Giant—A second early variety maturing in about 68 days. An improvement over the old Corey. Ears 6 to 8 inches, with large broad white grains of rich sugary flavor, stalks short, bearing one or two ears. A very desirable sort.

Country Gentleman.—70 days—Resembles the Shoe Peg on a larger scale, surpassing it in superior qualities, viz: deepness of grain, smallness of cob and richness of flavor. Will produce from three to four ears to the stalk. Much larger than the Shoe Peg.

Shoe Peg.—The kernel is small and very long, white and exceedingly sweet and tender. Is becoming more popular every year.



Large Late Mammoth Sugar

Large Late Mammoth Sugar.—85 days—The largest of all varieties productive fine flavor and sweet. A very desirable variety for the family garden.

Improved Stowell Evergreen.—80 days—Has no superior as a late table variety; ears large, and remains green longer than any other kind.

Golden Bantam.—A new introduction of merit—yellow, and very sweet. Small ears well filled out. Very desirable for first crop.

CORN—Field Varieties

Eight Rowed Yellow (Canada).—Ears large, and bright yellow color, generally used for re-planting, very early.

Longfellow, Long Yellow.—90 days—Ears averaging 13 inches. Very prolific. Narrow, small cob. Used quite frequently for re-planting.

Mammoth Chester County.—One of the very best for field culture, fine large ears, and producing a large quantity of fodder.

Blount's Prolific.—A plump, white sort bearing four to six ears to the stalk, very productive and fine for ensilage.

Mammoth Golden Dent.—A cross between the Mammoth Chester County and the Oregon; we think this the most productive variety grown.

Mastodon.—An early dent, of strong growth. Ears and grain large. A strong and quick grower, very productive, grains white and yellow.

Golden Beauty.—Matures as early as the Golden Dent, and surpasses it in size, beauty of grain and productiveness.

Leaming Early Dent.—An early, popular variety of Yellow Corn, medium ear, small grain, weighty and productive. Excellent for grinding.

Hickory King.—Remarkable for its large grain and small cob. A vigorous grower, ears round and of good size, two to four ears to the stalk, grain pure white.

White Ensilage.—Sown broadcast, or drilled in close rows, a handsome growth of green forage can be grown. If cut just when flower spike shows it is in its most nutritious condition.

CORN SALAD

Broad Leaved.—Used as a small salad throughout the winter and spring. Sow early in the spring in drills one foot apart, and keep weeds down by frequent hoeing. For winter and early spring use, sow in drills in August and September. Cover with straw on approach of winter

CRESS—(Pepper Grass)

Curled.—Used as a small salad. Sow very thickly in shallow drills, on a smooth surface, at short intervals throughout the season.

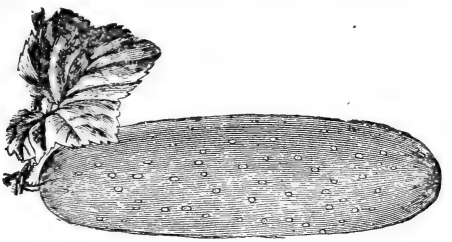
Broadleaved.—A favorite salad in general use.

Water.—Used as a salad in spring and fall, or as a garnish during winter. Start the seed in pans or moist earth and transplant to shallow water or a running brook.

CUCUMBER

The Cucumber can be grown by any one who has a few square yards of soil with an exposure to the sun. For early use, make rich hills of well rotted manure the latter part of spring planting a dozen or more seeds, covering one-half inch deep, pressing the earth firmly over them. When danger from insects is over, pull all but three or four of the strongest plants, make the hills from four to six feet apart. For pickles, plant as late as middle of July.

Jersey Pickle.—One of the very best of pickling cucumbers, vines vigorous and productive, fruit long, firm and crisp, when small, used for pickles, and larger for sweet pickles.



Improved Early White Spine

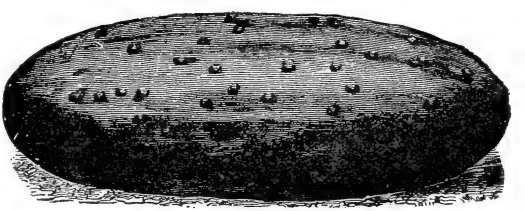
Jersey Prolific.—60 days. Earliest and hardiest productive variety, the fruit of small size and produced in pairs.

Early Frame.—Fruit is straight and well formed, flesh tender, though somewhat seedy; when young makes excellent pickles.

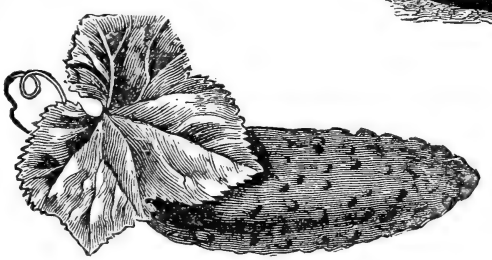
Improved Early White Spine.—60 days—The very best sort for table use; vines vigorous, fruit straight and handsome, color light green, with few white prickles; tender and of excellent flavor.

Long Green (Jersey Pickle.)—The best pickling variety, dark green color, tender, crisp, and productive.

Short Green Pickle.—50 days—This is the favorite Western pickling variety and is growing in favor here every season.



Improved Long Green



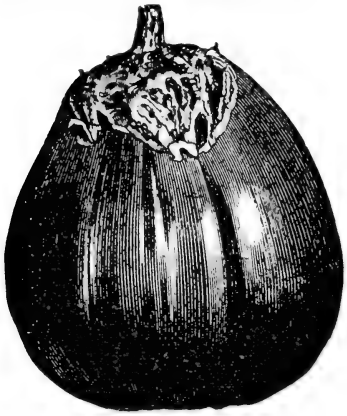
Gherkin (or Burr)

Gherkin (Burr Pickle.)—Small, oval shaped, prickly variety, used only for pickling.

EGG-PLANT

Sow in hot beds early in March; transplant middle of May to first of June, in a rich warm piece of ground, about thirty inches apart. Draw the earth up to their stems when about a foot high. Egg-plant seed will not vegetate freely without substantial heat, and if the plant gets the least chilled in the earlier stages of growth, they seldom recover. Repeated sowings are sometimes necessary. Care should be taken in cutting the fruit so as not to disturb the roots, which injures the plants. Matures for table in 120 days.

Early Long Purple.—This is one of the earliest varieties, hardy and productive, fruit long and of superior quality.



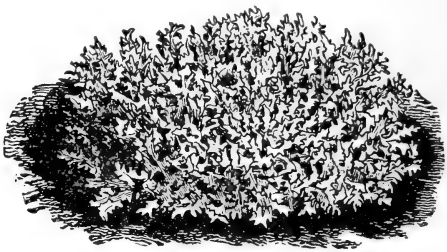
Improved N. Y. Purple Egg Plant

Improved New York Purple.—The best variety in cultivation; fruit large, deep purple color, occasional stripes of green around the stem; of very superior flavor.

Black Pekin.—Fruit black, large, smooth and glossy. Round to globular.

ENDIVE

An excellent Fall and Winter Salad, when Lettuce is getting scarce. Sow late in the Spring to middle of Summer in shallow drills, and thin out to a foot apart; blanch by tying the leaves together near the top.

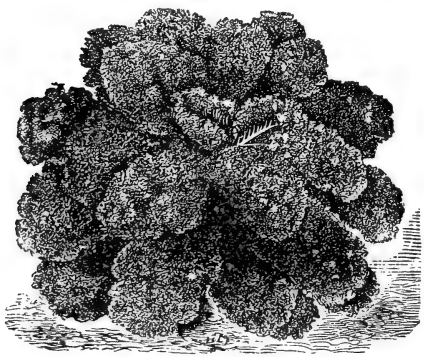


Green Curled Endive

Green Curled.—Is the hardiest variety, with beautifully curled, dark green leaves, which blanch white, and are very crisp and tender.

Broad Leaved Batavian.—Has broad, thick, plain or slightly wrinkled leaves. It is principally used for cooking, and making a larger head, is preferred for stews and soups; if the outer leaves are gathered and tied on the top, the whole plant will blanch nicely, and make an excellent salad for the table.

KALE (Borecole)



Dwarf German Greens or Kale

Sow from May to June, and set out the plants in July, in good rich soil; cultivate same as cabbage. For Spring use sow in September; protect during Winter with covering of straw. It takes 50 days to produce a crop fit for cutting.

Green Curled Scotch.—About two feet high, leaves dark green, curled and wrinkled, stands winter without protection.

Dwarf German Greens.—Makes excellent greens for winter use, dwarf and easily protected during the winter.

KOHL-RABI

Turnip Rooted Cabbage.—Grows on a stalk in the shape of a bulb 2 to 3 inches in diameter, the leaves protruding from the sides of the bulb. Requires a light, rich soil. Sow in spring in rows 1½ feet apart, thinning down to 8 inches. For fall, plant latter part of July. One ounce will plant 150 feet of drill.

LEEK

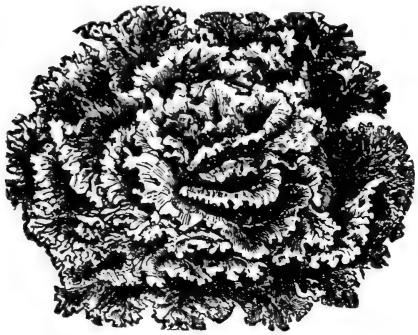
The Leek is hardy and of easy culture; sow early in Spring in trenches eight inches deep, and have the soil at the bottom fine and rich; thin six to eight inches apart, and when the plants are twelve inches high, gather the leaves together and fill the trench so as to blanch the lower part of the plant.

London Flag.—90 days—This is the best variety, and succeeds better in this country than any other.

Musselburgh.—Foliage fan-shaped and strong in growth. Large in size, and leaves broad. A fine market variety.

LETTUCE

There is no vegetable which is more universally used than this. It is of easy culture, and thrives best in rich, moist soil. Its quality depends largely upon rapid and vigorous growth; to secure this, have the soil rich and mellow, with frequent surface cultivation and an abundant supply of water. For an early crop sow in September in the open ground; transplant when large enough into cold frames; protect during winter in same manner as early cabbage; plant out early in April, or sow in hot-beds in February or March, and afterwards transplant. 40 to 50 days from seeding to maturity.



Early Curled Simpson (black seeded)

Loose-Leaved Varieties

Early Curled Silesian.—An early variety of strong growth, leaves large, light yellow and wrinkled. It does not form a head, but is the best variety for cutting when young.

Early Curled Simpson.—A black seeded, very large loose leaved sort, and larger than ordinary Simpson. Excellent for table.

Heading Varieties

Large Drumhead.—Heads large and fine, pale green without, and white at centre; crisp and tender, fine summer variety.

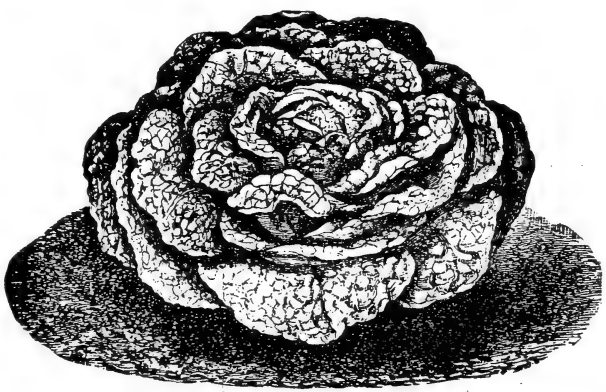
California Cream Butterhead.—A good all around summer lettuce. Heads large, compact and well formed. Has a decided buttery taste.

Tennis Ball (Black Seed)—An early sort for forcing, producing a small compact head, with few outside leaves.

Big Boston.—Heads large, white, and very solid, stands heat of summer, also excellent for autumn. Color, light green.

Boston Market.—An early sort good for forcing or in the open ground. Heads large, white, and very solid. Always crisp and tender and an attractive sort for market or table.

White Dutch Butterhead.—The best variety for cultivation in the latitude of Philadelphia, fine large heads, and stands the heat of Summer well.



Big Boston

Royal Cabbage.—Large, crisp and tender: a good Summer variety.

MELON (Cantaloupe)

Plant early in May, when the ground has become warm and dry, in hills six feet apart each way; use well rotted manure, and if plants grow very rank, finer fruit will be secured by trimming off the ends of the shoots when about three feet long. Do not plant near pumpkins, squashes or cucumbers, as they will mix with and injure the quality of the melons.

Golden Jenny.—Small, and very early; globe-shaped, skin green, ribbed and netted, flesh light green and of fine flavor.

Extra Early Rough.—A handsome fine flavored sort resembling the California in shape but smaller and more roughly netted.

Jenny Lind.—65 days—The earliest green fleshed melon, and the sweetest variety in cultivation; flesh green, quite small, slightly ribbed and well netted.

Netted Nutmeg.—Oval in shape; netting rough. A melon of fine flavor.

Hackensack.—A popular large sized melon, flattened at the poles, deeply netted and ribbed, flesh green and well flavored. One of the best for shipping, and is a favorite with market gardeners.

Montreal.—Largest of the nutmeg varieties; averaging a weight of 15 lbs., nearly round, flattened at the ends, deeply ribbed green netted skin. Flesh green, thick, and of fine flavor.

Fordhook or Burrell Gem.—A fine, pointed variety. Well ribbed with gray netting. Skin a rich, dark green. Flesh a deep salmon, tender and sweet. The flesh is thick and firm, ripening close to the skin, and leaving but a small cavity for seed.

Jenny Lind Improved.—65 days—Resembles the old variety only that it matures earlier and is better filled out, roughing up better, and keeping fully a week longer than any other variety. Is a handsome green fleshed sort and invaluable for a first early; and of a delicious quality.

Rocky Ford.—70 days—The flesh is deep and thick, and light green in color, except next the seeds, where it inclines towards yellow. The flavor exceedingly fine. The skin is green, regularly ribbed and thickly netted. It is a firm, solid melon and will carry in perfect condition for a week or more after its removal from the vine. It is a heavy cropper and is in wide favor as a market melon. Indeed, its ability to bear transportation without breaking down has made it one of the most profitable of crops, and explains why it is so universally grown. It has many local names. In New Jersey it is known as Netted Gem, Golden Jenny and Golden Gem. In Colorodo it has the name of Rocky Ford, from a locality where it grows in great abundance and perfection, and from whence it is shipped all over the country, even to Philadelphia and other large Eastern cities.

MELON (Water)

Plant in hills eight to ten feet apart each way. Plant eight or ten seeds in a hill, and finally, when danger of insects is past leave but three strong plants.

Ice Cream.—Medium size, scarlet flesh and very sweet; an excellent variety.

Mountain Sweet.—An old sort still holding its own in the public favor. A first class productive melon, of large size, skin dark green, flesh a rich crimson, very sweet, and of fine flavor. Seeds gray.

Gypsy or Rattlesnake.—One of the large varieties, stands shipment long distances better than any other. Fruit long, smooth, distinctly striped and mottled light and dark green.

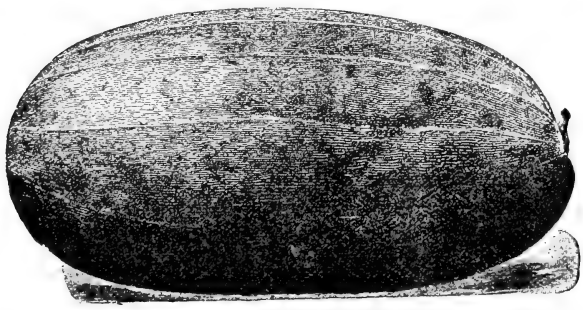
Orange.—Small size, flesh red, tender and sweet, flesh separates from the rind like an orange.

Black Boulder.—New, handsome oblong variety, skin very dark, deep scarlet flesh, sugary and of excellent flavor.

Light Icing.—75 days—Very light green skin, flesh bright red, crisp and sugary, excellent quality.

Dark Icing.—Skin dark green; in other respects like the preceding melon.

Kolb's Gem.—A recent introduction. Has a hard rind and is a good shipper. Shape nearly round. Flesh red and of good quality.



Kleckley's Sweets

Black Spanish.—A very solid thin rinded melon. Scarlet flesh.

Kleckley's Sweets.—A handsome melon for both the private and market garden. Shape oblong, skin dark green, and slightly mottled, thin rind, flesh, bright scarlet, very sweet, crisp, melting. Heart solid. One of the best melons grown.

Citron Water Melon.—This is the well known melon for making preserves, or condiments.

Dixie Watermelon.—85 days—Destined to supersede the Gem. If you want the best melon grown plant the Dixie. It is unsurpassed in fine eating qualities. Form long to half long, diameter large; rind dark with lighter stripes. Early as the Gem, equally productive. Flesh deep red; unequaled as a shipper. We have had seed of the best stock grown especially for our trade.

MUSTARD

Mustard is not only used as a condiment, but the green leaves are used as a salad, or cut and boiled like spinach. Matures in 30 to 35 days.

White English.—This is the kind usually preferred for salad. The leaves are light green, mild and tender when young; seed light yellow.

Brown Italian.—This is a larger plant than the preceding, with much darker leaves; seed brown and more pungent.

NASTURTIUM

Used as a pickle and highly esteemed. Sow in April and May, in drills two inches deep, five or six inches apart, and provide them with rods. It may also be grown to advantage as an ornamental climbing plant.

Dwarf.—Very ornamental for the vegetable as well as the flower garden.

Tall.—The seed pods are used for pickling or for garnishing.

OKRA, OR GOMBO

The green capsules of this plant are used in soups, stews, etc., to which they impart a rich flavor, and are considered nutritious. Plant the seed about the middle of May, in hills or drills. Plant the seed thickly, as it is liable to rot in the ground; rich ground is necessary. 60 days from planting to maturity.

Tall White.—About four feet high; pods eight to ten inches long.

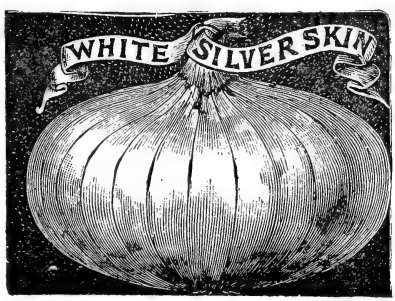
Dwarf White.—Two and a half feet high; pods five inches long; very productive.

ONION

CULTURE.—Onion seed should be sown as soon as possible in the spring, even if the weather is cold, so the soil works up well. This gives them a good start ahead of the weeds, and before dry weather sets in. After thoroughly pulverizing the soil, sow thinly, four or five pounds to the acre, in drills, 14 to 16 inches apart and about ¼ inch deep, in strong land, well manured, keeping them well hoed and free from weeds.

The Silver-skin and Yellow Strasburg are principally grown (for sets) in this vicinity. Sow the seed early in the Spring, very thickly in beds or drills. As soon as the tops die off in the Summer, remove them to a dry, airy place, and early in the following Spring replant in rows about two inches apart, the rows wide enough apart to admit of hoeing. The Onions by this process, are obtained of a large size early in the season. We can also supply the sets themselves early in Spring, at current market prices.

The Large Red Wethersfield may be reared to full size during the first season, by sowing in drills early in March, in strong land, and thinning them out to stand two or three inches apart keeping them well hoed.



Silver Skin

White

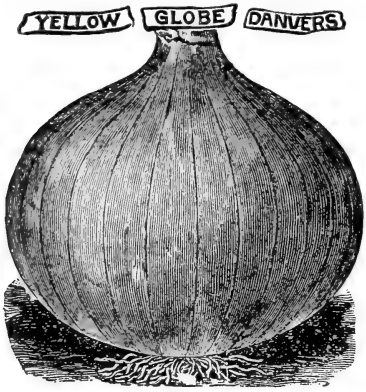
Extra Early White Pearl.—A transparent, waxy, early variety, flat, and of very mild flavor. In some sections attaining a size, 5 to 6 inches in diameter.

Silver Skin.—85 days—Large white flat Onion, of mild flavor; fine for early winter use, and very desirable for pickling. It is the best keeper of the white varieties.

Queen.—A silver skinned variety, of mild flavor, early, a good keeper, and an excellent pickling Onion.

White Portugal.—Grows to good size, mild and sweet, resembling the ordinary silver skin. When sown thickly very desirable for pickling.

Southport White Globe.—In shape same as Yellow or Red Globe, but milder—not so good a keeper.



Yellow Globe Danvers

Prizetaker.—One of the best and most popular among the Yellow Globes. Of a bright clear straw color, thin-necked, and very attractive. Fine in flavor and a desirable sort.

Red

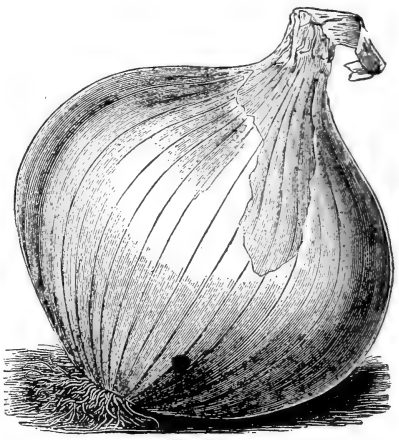
Extra Early Red.—100 days—A large yielder, of good form and flavor, deep red color, and keeps well. Ten days earlier than the Wethersfield.

Large Red Wethersfield.—110 days—The standard Eastern variety. Grows to large size directly from the seed; skin deep purplish red; form round, flat; flesh purplish white; and stronger flavored than any of the other kinds.

Yellow

Yellow Strasburg.—The old popular Philadelphia variety; not as strong flavored as the Red; a first rate keeper, and valuable for shipping.

Yellow Globe Danvers.—115 days—A fine variety, originating in Danvers, Mass.; above the medium size, oval shaped; skin yellowish brown; flesh white, mild and well flavored, very productive.



Prizetaker

ONION SETS

The Onion sets grown in the vicinity of Philadelphia are recognized everywhere as the best in the country; they are more solid and brighter, and their keeping qualities much better than those grown elsewhere. The best varieties are named below. Onions grown from sets come into market long before those grown directly from the seeds, and in consequence much higher prices are realized from them.

Extra Early Red. Strasburg. Yellow Danvers. Silver Skin.

Winter Onions.—(Egyptian, Perennial, or Tree Onions.)—An unusually hardy variety in the colder States, remaining in the ground with safety all winter. It starts early in the Spring and may be bunched and marketed several weeks before any other variety. The quality is inferior, but the bulbs find a ready sale when other varieties of onions are wanting.

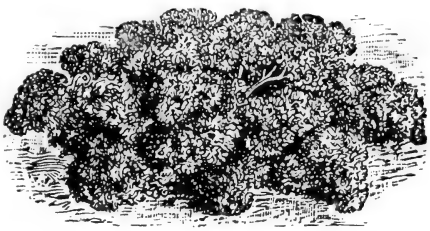
PARSLEY

Sow early in April in rows. Soak the seed a few hours in warm water before sowing, or it may lay two or three weeks in the ground before vegetating. A few Radish Seed mixed with the seed when sowing will mark the rows and facilitate weeding. One ounce to 150 feet of drill. Make open air sowing in April.

Plain or Single.—Dark green color, and very hardy.

Double Curled.—A dark green market variety of dwarf habit. Stands the winter better than other varieties but is less curled.

Moss Curled.—Leaves bright green, curled and crested like fern or moss, very ornamental for garnishing or garden decoration.



Double Curled Parsley

PARSNIP

Sugar Parsnip

This well-known culinary vegetable does best on a deep, rich, sandy soil; fresh manure should not be used, as it is apt to make the roots coarse and ill-shaped. The seed is sometimes slow to germinate; it should be sown early as possible, covering half an inch deep, and the soil pressed firmly over the seed; thin out so that the plants will stand four inches apart.

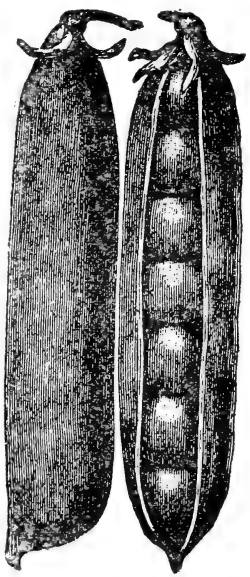
Sugar or Hollow Crowned.—80 days—The very best for table use, very productive.

PEAS

The Pea is so generally known that it is needless to give any description of it. There are many new varieties coming out every year, most of which turn out to be no better than the older sorts. We have carefully culled them over, and our list will be found to contain all that are really valuable.

The Pea matures earliest in a light, rich soil; but for general crop, a rich, deep loam will be found best. The Extra Early varieties should be sown as soon as the ground can be worked in the Spring, and continue every two weeks for a succession. The tall varieties require brush stuck in between rows. The wrinkled varieties are superior, more delicate in flavor, and remain longer in season than the smooth sorts, but are not so hardy.

The dwarf varieties suit best for small gardens, and can be planted in rows one foot apart. One quart for 75 feet of drill, two to three bushels to the acre.



Mingle's Extra Early

FIRST EARLY

Improved Premier Extra Early Pea.—48 days—This is undoubtedly the best and earliest Pea grown.

Mingle's Extra Early.—48 days—For family use this is probably equal to the Improved Premier; it does not ripen so evenly, but keeps in bearing longer.

Nott's Excelsior.—50 days—A fine dwarf wrinkled sort, maturing as early as most smooth varieties. Very tender and of fine flavor. Pods 2½ inches. Vine 14 inches.

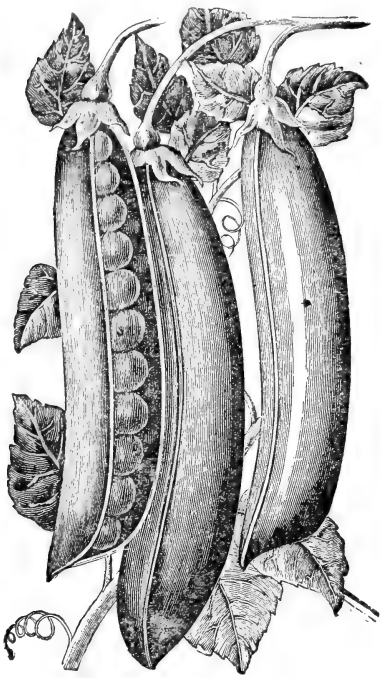
American Wonder.—52 days—A hybrid between Champion of England and Little Gem; it is an enormous cropper, and ripens in about fifty days from germination. Pods 2½ inches. Vine 10 inches.

Philadelphia Extra Early.—Form of extra early. Sold in some sections as Extra Early.

Gradus.—The greatest advance, and one of the most desirable sorts introduced during the last fifteen years, having large handsome pods, nearly as large as Telephone, and of

similar shape, well filled with large peas, sweet, tender, and of fine flavor, ripening with the earliest. No other pea introduced for years has met with so extensive sale and commanded so high a price. Very quick to germinate and matures with the earliest sorts; with quick, rich, warm soil and favorable conditions fairly productive. Foliage large and luxuriant, pale green in color; pods long, straight, slightly rounded at the point; seed large, wrinkled, cream color, tinged with green; height 3 feet.

Sutton's Excelsior.—A marked improvement in the dwarf wrinkled class. Similar in habit of growth to Nott's Excelsior, but bearing very large, broad pods filled with large peas, tender and of exquisite flavor. As a wrinkled sort it leads in earliness, with much larger and handsomer pods than any dwarf early wrinkled pea yet introduced. It is a pea of first-class merit, and a good cropper. Pods 3 inches long, broad, straight and well filled. Seed, pale green, wrinkled. Vine, 15 inches.



Alaska

Alaska.—An extra early, vine about 2 feet high, seed green and round, in well filled pods, produced in abundance. Excellent for market or family use.

Laxton's Prolific.—Height 3 feet, an extra early. Pods 3¼ inches and blunt, very prolific and well filled; seed wrinkled, cream color tinged with green. Vine, 3 feet.

Ameer.—Similar to Alaska, but not quite so early. Vine a little longer, pod not quite so well filled and somewhat curved. Pods 3 inches long, broad, curved; seed, smooth, light green, dented.

First and Best.—A desirable Extra Early. Vine 3 feet, and a strong grower, continues in bearing as long as other Extra Early Sorts.

Second Early

McLean's Little Gem.—Highly recommended for garden cultivation; quite dwarf, and productive.

McLean's Premium Gem.—An improvement on the Little Gem, being larger and more productive. Does not ripen quite so early, is very luscious in flavor, and is a general favorite. Pods 2½ inches. Vine 14 to 16 inches. Green wrinkled seed.

Advancer.—55 days—A green wrinkled variety maturing in from fifty to sixty days, producing an abundance of well filled broad, long pods, considered one of the best of its kind. Seed green, wrinkled. Pods 3 inches. Vine 20 inches.

Abundance.—Very prolific in long, round well filled pods of delicious flavor. Vine, 20 inches.

Horsford's Market Garden.—60 to 65 days—An old favorite, of delicious flavor; foliage dark, and continues long in bearing, a universal favorite. Pods 2½ inches. Vine 22 inches.

Fillbasket.—Height 30 inches, of branching habit; pods well filled and therefore indispensable to the market gardener, and large croppers.

Late

Dwarf Champion.—44 days—Very much liked by those who have tried it. In quality and flavor equal to Champion of England, and the vine only 2 feet. Equal to Little Gem.

Everbearing.—A fine wrinkled pea, about 2 feet high, well adapted for late summer and autumn. A continuous bearer, as its name indicates.

Pride of the Market.—60 days—Habit of growth and general appearance, both of vine and pod closely resemble the Stratagem, only deeper in color, and ripening a week later. Pods 3½ inches. Vine 18 inches.

Daisy or Dwarf Telephone.—Among the medium early dwarf sorts, ripening a week ahead of Stratagem. It is a most desirable pea on account of the large size, beautiful shape and fine quality of its well-filled pods, containing 6 to 9 tender sweet peas. Seed, green, wrinkled. Pods 4 inches. Vine, 18 inches—very vigorous and quite prolific.

Champion of England.—Universally admitted to be one of the richest and best flavored Peas grown; height four to five feet; seed whitish green and shriveled, and a profuse bearer.

Stratagem.—Extra large pods of large tender peas, high, seed blue, wrinkled. Pods 4 inches. Vine 20 inches.

Improved Telephone.—One of the recent introductions from England, where it is highly prized; grows about three feet high, and is the best tall Pea in existence, an enormous bearer, producing straight, showy pods, containing from nine to ten peas in a pod.

Long Island Mammoth.—Very popular with the farmers in most sections who want a large handsome pod of deep green color that carries well. Is becoming more popular every year. Height 3 feet.

Yorkshire Hero.—Vines stout, about two feet high, pods broad and well filled, large Peas; hardy, productive, and superior flavor, and will be preferred to any other, by those who want a rich marrow-like Pea.

Large White Marrowfat.—About five feet high, and of strong growth; pods large, round and well filled; is undoubtedly, one of the greatest bearers in field or garden.

Large Black-Eyed Marrowfat.—A late variety, well known on the Philadelphia market as a prolific bearer, and is recommended as one of the very best Marrowfat varieties.

Field Sorts.—We keep in stock all the varieties used for soiling or ploughing in as green manures; a practice which is becoming quite general in this latitude.

PEPPER

Sow in hot beds in March, or in a warm border early in May, transplant and thin out to stand sixteen or eighteen inches apart; hoe frequently, to keep down the weeds. Edible in 100 to 120 days.

Bull-Nose.—A large sort, of square form, mild, thick and hard; suitable for filling with cabbage, and for a mixed pickle. It is notwithstanding its size, one of the earliest varieties.

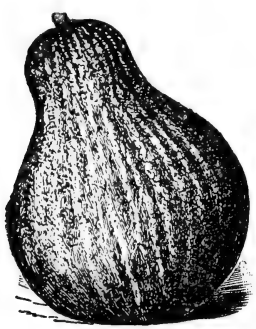
Ruby King.—Fruit 5½ x 3½, bright red in color and of distinctively mild flavor.

Large Sweet Spanish or Bell.—Somewhat resembling Bull-Nose, but much larger. Early and desirable.

Long Red Cayenne.—Pod long, slim and pointed; color, bright red and very pungent.

Sweet Mountain.—Nearly identical with the Bull-Nose; perhaps somewhat larger.

Large Sweet Spanish (or Bell) Pepper

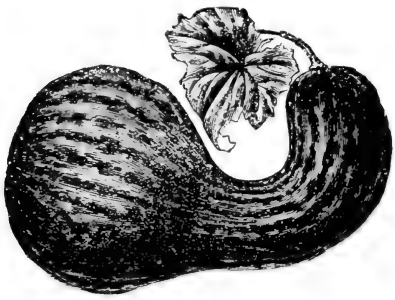


Sweet Potato Pumpkin

PUMPKIN

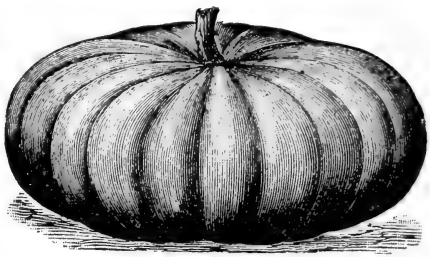
Sow in hills eight or ten feet apart each way, or in fields of corn, about every fourth hill; avoid planting near melon or squash vines, as they will hybridize.

Sweet Potato.—Flesh yellow and dry, the very best for family use.



Cashaw (crook neck)

Cashaw.—Long Yellow Crook Neck, one of the best among Pumpkins; sometimes weigh as much as sixty to eighty pounds.



Cheese

Cheese.—One of the best for table use; shape flat, like a cheese box; flesh yellow and sweet.

Common Field.—Best for cattle feeding.

POTATO

Early Maine,	**Dakota Red**	**Snow Flake,**
Early Rose,	**White Peach Blow,**	**State of Maine,**
Houlton Rose,	**Beauty of Hebron,**	**Mammoth Pearl,**
Early Ohio,	**Irish Cobbler,**	**Green Mountain.**

The soil best suited to the Potato is a rich sandy loam, but it seems to thrive in almost any soil and climate. The best fertilizers are plaster, super-phosphate of lime and bone-dust. Plant as early in the spring as the ground can be worked thoroughly, covering about four inches in warm soil, and in wet soil three inches deep, cultivate to keep down weeds, and draw earth to the plants as they advance in growth.

There are many so called new varieties offered every season, but they disappear quickly. There is really none to be found better than the Early Rose, State of Maine and Green Mountain.

RADISH

CULTURE.—Radishes must make a rapid growth to be crisp and tender. For early use seed should be sown in the hot-bed, in drills four or five inches apart and half an inch deep. For an early crop in the open ground select a sandy soil and a warm south border, under the shelter of a fence or building, if possible. A load of fresh sandy loam from the woods is better for the radish crop. As soon as the first leaves appear sprinkle with soot or ashes to save from the little turnip fly. 1 oz. will sow 150 feet of row.

The secret in sowing good radishes consists chiefly in the observance on the part of the grower of three points. First, they should be grown on light, quick soil. Second, they should be given plenty of water, and last, but not by any means least, the right kind of seed should be sown. Radishes grow very quickly, and if not supplied with plenty of water are apt to be pithy.

First Early

Early Scarlet Turnip.—19 days—The earliest of the Turnip varieties; small root and small top.

White Tipped Scarlet Turnip.—18 days—Fine French variety; scarlet bulb with white tip, very showy and ornamental.

Early Red Turnip Rooted.—This is the old favorite and there are few that are better.

French Breakfast.—A bright red, tipped with white, oblong in shape; crisp and tender. Rapid in growth and fine for table.

Early Deep Scarlet Turnip Rooted.—19 days—An improvement on the Red, very smooth and rich dark color.

Early Deep Scarlet Turnip Rooted

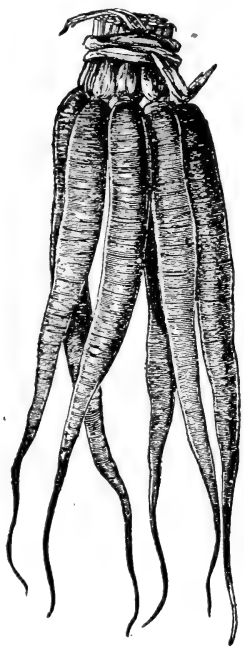
White Box

White Box.—17 days—Fine for forcing or planting in the open ground, short-topped, mild and sweet. A favorite with Philadelphia market gardeners.

Early White Turnip Rooted.—17 days—Like the Scarlet in shape, but pure white in color; bears the heat well without becoming spongy, a few days later than the Scarlet.

Early Scarlet Olive-Shaped.—In form of an olive; fresh rose colored, tender and excellent.

White Ladyfinger



Long Scarlet Short Top (Improved)

Second Early

Early Long Scarlet Short Top (improved).—The best standard variety for private gardens or market use, is brittle and crisp, and of quick growth; color bright scarlet, small top, and is uniformly straight and smooth.

White Ladyfinger—25 days—In shape similar to Long Scarlet Short Top, sweet, mild, and brittle. Annually in greater demand as one of the best long radishes.

White Summer.—A favorite turnip-shaped variety for the family garden. Round, smooth, crisp and mild.

Icicle.—An extremely early white sort, well adapted for either forcing or open ground; slender and tapering in shape, very mild.

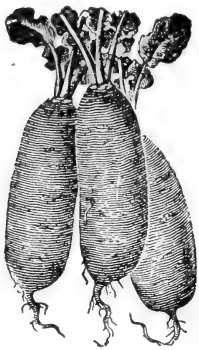
White Strasburgh.—A very popular variety. Pure white. Of tender quality and remains good for a long while. Matures in 30 to 35 days.

WINTER RADISHES

(50 to 75 days, according to variety)

Winter Radishes are not appreciated as much as their merit warrants. They are easily grown, have few insect enemies and can be easily preserved through the winter, and there is no vegetable which furnishes a more acceptable relish. While quick growth is not so essential for these as for the earlier sorts, they do best on a rich soil which has been

made as fine and friable as possible. Sow late in spring or during the summer in rows two feet apart and thin the plants about four to the foot. They may be pulled as wanted through the fall and on approach of severe freezing weather should be harvested, part packed in damp sand and stored in a cool cellar or other easily accessible, cool place for winter use, and the balance buried in the ground as one would bury potatoes for spring use.



Scarlet China Winter Radish

Long Black Spanish.—**Winter**—One of the latest as well as one of the hardiest of Radishes, and is one of the best for Winter use; roots oblong, black, of large size and firm texture.

Round Black Spanish.—An excellent Round Black Winter variety. Popular among Germans.

Long White Spanish Winter.—Differing from the Black Spanish only in color.

Scarlet China Winter.—Form conical, of a bright rose color, flesh firm and pungent flavor.

White China Winter.—Similiar in shape to the preceding, flesh piquant, solid and brittle, an excellent sort for late Fall or Winter use.

White China Winter Radish

SALSIFY OR VEGETABLE OYSTER

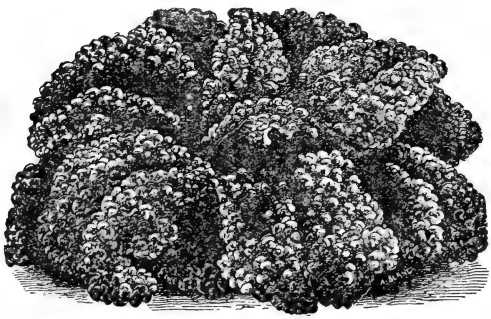
Sow early in the Spring, in deeply dug and richly manured soil, in drills eighteen inches apart. Keep clear of weeds, and when up a few inches, thin out, so as to stand four or five inches apart. This is a hardy vegetable and can remain in the ground all Winter for early Spring use but should be taken out before they start growing. It is excellent for the table, and can be served as Carrots, or, after being parboiled, may be made into cakes and fried like oysters, which they greatly resemble in flavor.

French.—Produces a tapering straight root about a foot long.

Sandwich Island.—Preferred on account of its larger size, and absence of stringiness. Resembles a good sized parsnip and is very mild and delicately flavored.

SPINACH

The spinach is very hardy, wholesome and palatable, and makes a delicious dish of greens. Should be planted in rich ground. Sow in drills one foot apart, and commence thinning out when the leaves are an inch wide. For early spring use, the seed should be sown middle of Autumn, and will require through the Winter a slight protection of leaves or straw. For Spring and early Summer use, sow as early as the ground can be tilled and at short intervals, if a succession is desired. Edible in 40 to 60 days.



Norfolk Spinach

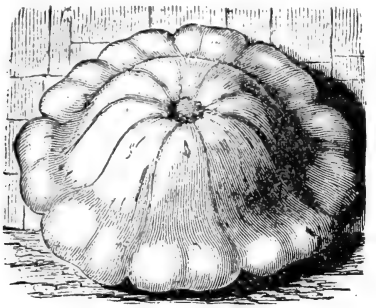
Round Leaved Savoy. — (Extra Curled)—This variety is the best and most popular with our market gardeners; leaves large, thick and fleshy, and stands the Winter well.

Bloomsdale.—A superior variety of Savoy-leaved Spinach, having a heavy re-curved bloated leaf of symmetrical form. Fine for outdoor planting in spring or fall, or under glass.

Norfolk.—Has a very erect habit of growth, and preferred by many on that account.

Long Standing.—New large crimped fleshy leaved variety; stands two weeks longer than any other variety before running to seed. Best kind for seed sowing.

Victoria.—A mammoth variety of good quality, much used in Europe.



Early White Bush (or Patty Pan)

SQUASH

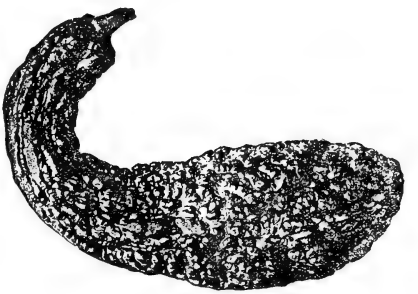
Cultivate same as Cucumbers or Melons. The summer varieties should be planted four or six feet apart each way, and the Winter sorts eight feet. Three plants are sufficient for a hill.

Early White Bush, or Patty Pan.—50 days—The earliest in maturing, and very productive.

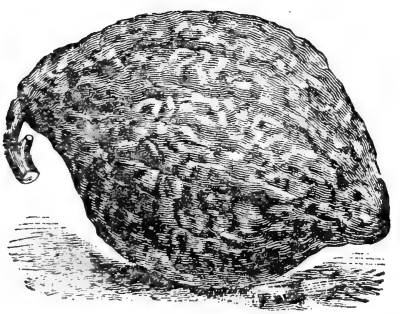
Early Golden Scollop Bush.—Like the preceding, except being of a golden color.

Golden Summer Crook-Neck.—40 days—The best of the Summer squashes, gold color, profusely covered with warty excrescences and of very superior flavor.

Winter Crook-Neck.—Shape like a Cashaw pumpkin. Grown for Winter use; is a good keeper



Golden Summer Crookneck



Hubbard

Boston Marrow (or Squash Pumpkin).—A Fall and Winter variety, very popular, oval form, thin reddish skin; when ripe, bright orange color. Excellent for pies, very sweet, and a heavy cropper.

Hubbard.—A very superior variety, flesh bright orange yellow; dry, sweet and rich flavored, good keeper, boils or bakes exceedingly dry.

Fordhook.—A superb variety for pies; it cannot be excelled.

TOMATO

Tomatoes do best on light, warm, not over rich soil and success depends upon securing a rapid vigorous unchecked growth during the early part of the season. To have them very early the plants should be started in a hot-bed; transplant carefully, and cultivate well as long as the vines will permit. Tying to a trellis or stakes, improves the quality. Ripen in 85 to 115 days according to variety.

Extra Early. (or cluster).—85 days—The earliest variety, and desirable only on that account.

Earliana.—One of the new standards of recent introduction ripening ahead of other and later varieties, medium in size, fruit growing in clusters. Very solid, and a good acquisition.

Extra Early Globe.—Almost as early as the Early Cluster, larger and smoother, it is a favorite among truckers, and is a good shipper.

Matchless.—Quite early, vigorous growth, vines large, and productive throughout the season. Fruit dark rich color, slightly below medium size, but always round and smooth.

Acme.—105 days—One of the most popular varieties; vines large, and produce abundantly until frost. Fruit in clusters, color maroon or reddish, with slight tinge of purple, invariably smooth and round, of good size and unusually solid, is a good shipper.

Paragon.—Vines large, liberal and productive; fruit large, round, of a dark crimson color, occasionally tinged with purple. The flesh is thick and fine flavored, and taken altogether, it is the best variety yet produced.

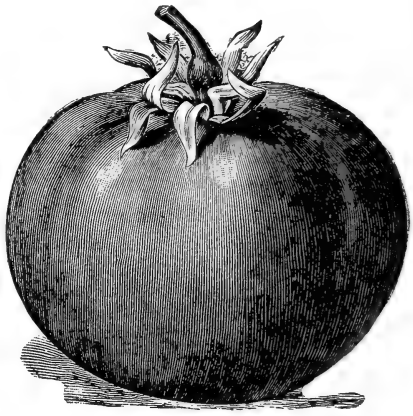
Livingston's Perfection.—A handsome new Tomato, so nearly identical with the preceding as to be interchangeable with it.

Red Stone.—115 days—A well known and favorite variety, rich color, solid flesh, and desirable in every way.

Livingston's Favorite.—This is the most perfect shaped Tomato in cultivation, is smoother than the Paragon, and does not crack nor rot like the Acme. It ripens evenly, and as early as any good variety; very prolific, good flavor, few seeds, solid, and a good shipper.

Queen.—Well known as one of the best; vines of medium size, but producing large quantities of fruit, which is large, smooth, and bright red in color.

Large Red.—An old, reliable variety, resembling the Tilden.



Red Stone

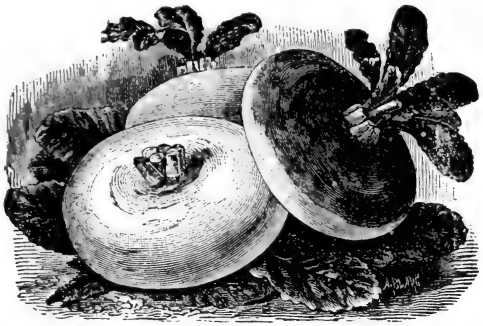
Livingston's Beauty.—115 days—The very latest production of Mr. Livingston, and claimed to be the best; color a bright glossy crimson, slightly tinged with purple, grows in clusters of four or five large fruits, and retains its size until late in the season, and will average more pounds of fruit to the acre than any other variety.

Beefsteak.—One of the best; color maroon, solid flesh, very productive.

Pear Shaped.—Yellow or Yellow Plum. Used for preserves and pickles; is extraordinarily productive.

TURNIP

(Maturing from 60 to 90 days according to variety and season.)



Early Flat Red or Purple Top

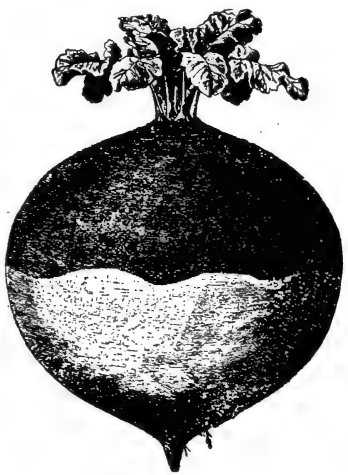
Early Flat Dutch.—This is a quick growing strapleaved, white variety, resembling the Flat Red Top excepting that its top is white. A favorite sort for either the market or family garden. Has a mild pleasant flavor, and is as desirable in every way as the Red Top Flat.

Early Flat Red or Purple Top.—(Strap Leaved)—Very similar to the preceding except in color, being purple or dark red on top; form round, flat, with but few leaves, which are of upright growth. This is the standard variety, and there is none better for general purposes.

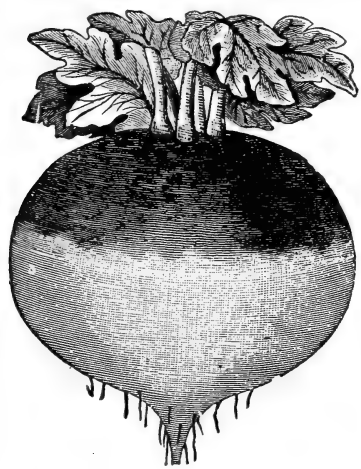
Large Early Red Top Globe.—Only recently introduced; very attractive, of large size and rapid growth. It is a very heavy producer, and quite as early as the Flat Purple Top.

Pomeranean White Globe (Strap Leaved)—A free growing, rough-leaved variety, and very productive; will, frequently, in good rich soil grow to ten or twelve pounds in weight; it is a perfect globe in shape, skin white and smooth. A first rate kind for either table use or stock.

Cow Horn.—This variety is carrot-shaped, and grows nearly half out of the ground; is pure white, except slight shade of green at top. It is well flavored, of rapid growth, and seems to be increasing in favor every year.



Large Early Red Top Globe



Improved Purple Top Yellow Ruta Baga

Yellow, or Amber Globe (Strap-Leaved)—This is one of the best of the rough leaved sorts, for either table use or for stock; flesh yellow, fine grained and sweet; hardy, keeps well, is a good cropper, and grows to a very large size.

Golden Ball.—A small yellow turnip of second size. Early, and a good keeper.

Yellow Aderdeen.—This is a very nutritious turnip; flesh pale yellow, tender and sugary; is a good keeper, hardy and productive. It is an old favorite, and for stock purposes hard to beat.

Improved Purple Top Yellow Swede (Ruta Baga)—This is the standard and most important now cultivated for stock purposes; noted for rapid growth, large size and nutritious quality, and cannot be too highly recommended.

White Fleshed Purple Top Ruta Baga.—This differs mainly from the preceding in color; possesses most of the good qualities of the yellow, but is of slightly milder flavor, is not as valuable for stock as the yellow.

The foregoing comprise about all the desirable varieties for either table or stock use. There are several others which differ from each other more in name than anything else, being in most instances identical in their characteristics. We have not noted them here, but any varieties not named, which our customers may desire, we will cheerfully procure, and at such prices as will compare with any other Catalogue.

AROMATIC AND SWEET HERBS

Anise,	***Fennel,**	***Rosemary,**
Basil, Sweet,	***Lavender,**	***Sage,**
Caraway,	**Marigold, Pot,**	***Savory, Summer,**
Coriander,	**Marjoram Sweet,**	***Savory, Winter,**
Dill,		***Thyme.**

Those marked with * are perennial, and when once obtained in the garden, may be preserved for years with a little attention. Most of the varieties thrive best on rich, sandy soil, which should be carefully prepared and cultivated, as the young plants are for the most part delicate and easily choked out by weeds. Sow as early as the ground can be made ready, in drills sixteen to eighteen inches apart, or sow in beds in April, and set plants out in June, they should be cut when in bloom, wilted in the sun, and then thoroughly dried in the shade.

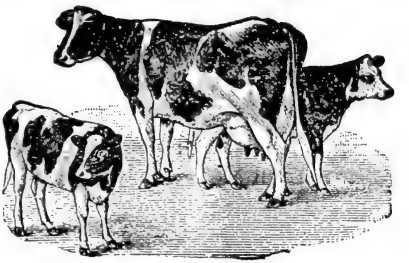
BIRD SEEDS

Canary, Millet, Maw,
Hemp, Rape, Lettuce.

¶¶And other articles required by the Bird Fancier. See Pages 47 and 48.

RAT CORN—Will exterminate Rats, Mice and Gophers from your premises in a safe, sane and sanitary manner. No odors or smells. It mummifies them. No matter where they die, they simply DRY UP. Positively do not smell. Rat Corn is a new and scientific discovery, and without a doubt the greatest rat destroyer in the world; the only one that kills rats without any bad, dangerous or disagreeable effects.

A trial will convince you. 25c, 50c and $1.00 per can. 6-lb. pail, $5.00.



KOW KURE

THE GREAT COW MEDICINE

EVERY MERCHANT who gets or wants to get the farmer's trade—the best trade in the world—must be quick to see and appreciate just the goods needed. Most farmers keep cows, and most cows have, at some time one or more of the diseases that is easily cured by Kow Kure.

If you have Kow-Kure in stock you have one more hold on the farmer's trade, and a big one. If you have not it. GET IT.

If you will put Kow-Kure in stock the Association will do local advertising for you. We handle thousands of packages of this medicine and advise you to try it.

EVERY FARMER who keeps one or more cows should know that Kow Kure cures abortion (slinking), barrenness (failure to breed), scouring in cows and calves, bunches and swelling in bag, milk fever. Prevents tuberculosis, removes retained afterbirth, enriches the blood, improves the appetite, increases the milk, is a medicine, not a food, is for cows only, has stood the test for ten years. To know these facts and act upon them is to insure dairy against profit-destroying diseases, and guarantee a uniform standard of excellent health. Kow-Kure makes healthy cows, and healthy cows pay.

We have high testimonials in its favor.

Kow-Kure is put up in two sizes. Enough medicine in one package to treat one cow from five to eight weeks, according to the disease. Directions for use with every package. The Price is

Large Cans, weight 3¼ lbs. $1.00
Small Cans, weight 1½ lbs. ..... .50

Postage extra, according to Parcel Post Regulations.

Made only by the Dairy Association, Lyndonville, Vt.

"XX" RED CROSS HEALTH GRIT

Is superior to the other Red Cross brands by reason of its having more concentrated Pure Bone Ash, and tonic properties, and costs more than any other Health Grit to prepare. The analysis of the droppings from the birds fed on the "XX" shows 62% less waste of protein than that from birds fed without it, proving conclusively the great waste of food that goes in the droppings that should be used, adding flesh more quickly, giving more vigor and strength to the birds, and a great saving on feed. The price may seem high in proportion to that of ordinary Grits, but as the manufacturers make it in immense quantities, the price has been reduced to a minimum at $2.00 per sack of 100 lbs.

PRATT FOOD COMPANY'S PREPARATIONS

PRATT'S ANIMAL REGULATOR.—A stimulating tonic, consisting of pure medicinal roots, herbs and barks, carefully blended to act on the blood, bowels, liver and digestive organs of horses, cows, sheep and hogs, causing perfect digestion. In Packages, 25c. each.

PRATT'S POULTRY REGULATOR.—Formerly sold under the name of Pratt's Poultry Food. Entirely different from the Animal Regulator. Makes a perfect regulator, tonic and stimulant, suited to the constitution of poultry. Regulates the blood, bowels and digestive organs of fowls, producing good, rich blood, healthy fat, sturdy muscles, strong bones, red combs and wabbles, brilliant feathers and fertile eggs. Stands unrivalled as an egg producer, and when regularly used, the hens lay throughout the year. In Packages, 60c., 25c. and 10c. each.

PRATT'S LICE KILLER.—(Powdered form)—Non-poisonous and non-explosive. Being stronger, has greater disinfecting qualities than similar preparations. Quickly and thoroughly kills lice on ducks and chickens. Rids horses, cattle, hogs, dogs, and cats of lice. Destroys ticks on sheep, insects and bugs infesting shrubbery, vines and plants. Drives out moths and bugs from furniture, closets, carpets and clothing. In Packages, 25c. and 10c. each.

PRATT'S ROUP REMEDY.—Not only cures, but prevents roup, colds, canker, catarrh and diphtheria, and should be given to fowls frequently, to keep disease away. It is absorbed by the blood at once, purifying the system, allaying inflammation and reducing fever. Boxes, 25 cents each.

PRATT'S GAPE REMEDY.—An unfailing guaranteed remedy for gapes. If used in the drinking water from the start, until the chicks are four weeks old, gapes will be practically unknown. Boxes, 25 cents each.

PRATT'S LIQUID LICE KILLER.—Is the strongest liquid preparation on the market for the destruction of poultry lice on horses, cattle, cows and hogs, ticks on sheep, and fleas on cats and dogs. Also useful for cleaning and disinfecting drains, sinks, cellars, stables, and outhouses. Cans, 35 cents each.

DR. HESS' POULTRY PREPARATIONS

DR. HESS' POULTRY PANACEA—The greatest known Poultry tonic and egg producer. A combination of medicinal ingredients similar to Dr. Hess' Stock Tonic but especially prepared for fowls of all kinds and all ages. It increases digestion—thus increasing egg production. More growth, brighter plumage, shorter moulting season, earlier layers—are the guaranteed benefits following the use of Poultry Panacea. The cost—One extra egg pays for all the Panacea a hen eats for three months.

1½-lb package, 25c. 5-lb. package, 60c. 25-lb. pail, $2.50.

DR. HESS' INSTANT LOUSE KILLER.—The original Powder Louse Killer that has many imitations. The Louse Powder that is guaranteed to kill Lice on Poultry, Horses, Cattle, Ticks on Sheep, Bugs on Cucumber, Squash and Melon vines, Cabbage worms, Slugs on Rose Bushes, etc. Also a reliable disinfectant and deodorizer. Put up in round can with perforated top—easily applied, and the result is guaranteed.

1-lb. can, 25c. 3-lb. can, 60c.

DR. HESS' ROUP REMEDY.—For the treatment and prevention of Roup, Diphtheria and all catarrhal diseases of fowls. It is an oily preparation, having antiseptic, emollient or healing properties, and is non-irritating.

4-oz. can, 25c. 10-oz. can, 50c.

PRICE LIST

Terms of sale, etc., see second page of cover.

As we are not bound by these prices after March 1st, customers ordering after that date should submit us their orders for latest quotations.

VEGETABLE SEEDS
IN BULK

Each of the following put up in 5-cent packets, except where otherwise noted Beans, Peas and Corn also excepted

ASPARAGUS	Oz.	¼ Lb.	Lb.
Conover's Colossal	.10	.15	.50
Barr's Mammoth	.10	.15	.50
Palmetto	.10	.15	.50

Each of the above, 5 **cents** per packet

ASPARAGUS ROOTS (when in season)

Conover's Colossal,
per 100 .60
Per 1000 4.50
Palmetto, per 100 .60
Per 1000 4.50

BEANS (Bush or Snapshorts)				
(Green-podded)	Qt.	4 qts.	Peck	Bush.
Early Red Valentine	.25	.70	1.25	4.50
Early Long Yellow Six Weeks	.25	.70	1.25	4.50
Late Refugee (1000 to 1)	.25	.85	1.40	4.60
Giant Valentine Stringless	.25	.80	1.50	5.50
Round Yellow Six Weeks	.25	.70	1.25	4.50
Burpee's Stringless	.25	.85	1.50	5.50
Longfellow	.25	.80	1.50	5.00
Black Valentine	.25	.80	1.50	5.00
Royal Dwarf, White Kidney	.20	.70	1.25	4.50
Large White Marrow	.20	.70	1.25	4.50
Dwarf White Navy	.20	.70	1.25	4.50
(Wax-podded)				
Currie's Rustproof Wax	.25	.85	1.50	5.50
Dwarf German Wax(black seed)	.25	.85	1.50	5.50
Golden Wax	.25	.85	1.50	5.50
Wardwell's Kidney Wax	.25	.85	1.50	5.50
Davis Kidney Wax	.25	.85	1.50	5.50
Round-podded Kidney Wax	.25	.85	1.60	5.50
(Bush Lima)				
Burpee's Improved Bush Lima	.40	1.50	2.75	10.00
Burpee's Bush Lima	.35	1.25	2.00	7.25
Dreer's Bush Lima	.35	1.25	2.00	7.25
Fordhook Bush Lima	.40	1.50	2.75	10.00

BEANS (Pole)	Qt.	4 qts.	Peck	Bush.
Horticultural	.30	1.00	1.75	6.00
White Creaseback	.30	1.10	2.00	7.00
White Dutch Case-knife	.30	1.10	2.00	7.00
Lazy-wife	.30	1.10	2.00	7.00
Kentucky Wonder	.35	1.25	2.00	7.50
(Pole Lima)				
Ex Ey Jersey Lima	.35	1.20	2.00	7.50
Salem County Improved Lima	.40	1.50	2.50	9.00
Dreer's Improved Lima	.30	1.00	1.75	6.50
King of the Garden Lima	.30	1.00	1.75	6.50
Challenger Lima	.30	1.00	1.75	6.50
Shotwell's Perfection Lima	.30	1.00	1.75	6.50
Small White Lima (Carolina)	.30	1.10	2.00	6.75

BEET	Oz.	¼ lb.	Lb.
Extra Early Bassano	.10	.30	1.00
Crosby's Egyptian Turnip	.10	.30	1.00
Eclipse	.10	.30	1.00
Early Blood Turnip	.10	.30	1.00
Bastian Early Turnip	.10	.30	1.00
Half Long Blood	.10	.30	1.00
Improved Long Dark Blood	.10	.30	1.00
Swiss Chard (Silver Beet)	.10	.30	1.00
Silesian Sugar	.10	.30	1.00
Imperial White Sugar	.10	.30	1.00
Half Long Blood, Queen of the Blacks	.10	.30	1.00
Detroit Dark Red	.10	.30	1.00
(Mangel Wurzel)			
Giant Long Red Mangel Wurzel	.05	.15	.40
Long Red Mangel Wurzel	.05	.15	.40
Yellow Globe Mangel Wurzel	.05	.15	.40
Red Globe Mangel Wurzel	.05	.15	.40
Golden Tankard Mangel Wurzel	.05	.15	.40

Each of the above, **5 cents** per packet

BRUSSELS SPROUTS			
Dwarf Improved (Pkts., 5c.)	.15.	.40	1.50

CABBAGE

(First Early)	OZ.	¼ LB.	LB.
Early Jersey Wakefield	.15	.45	1.50
Large Early York	.15	.45	1.50
Early York	.15	.45	1.50
(Second Early)			
Early Winnigstadt	.20	.60	1.75
Early Dwarf Flat Dutch	.20	.60	1.75
Danish Ball Head	.20	.70	2.50
Early Drumhead	.20	.60	1.75
Succession	.20	.60	1.75
Early Summer	.20	.60	1.75
(Late)			
Premium Large Late Flat Dutch	.20	.60	2.00
Premium Large Late Drumhead	.20	.60	2.00
Improved Drumhead Savoy	.20	.60	2.00
Red Dutch (for Pickling)	.15	.60	2.00

Each of the above, **5 cents** per packet

CARROT

Orange Danvers Half Long	.15	.40	1.50
Chantenay Half Long	.15	.40	1.50
Early Half Long Scarlet (stump rooted)	.15	.40	1.50
Improved Long Orange	.10	.35	1.20

Each of the above, **5 cents** per packet

CAULIFLOWER

Early White Snowball. Pkts., 10 cents each	.60	2.00	6.00
Lenormands. Pkts., 10c. each	.60	2.00	6.00
Autumn Giant. Pkts., 10c. each	.60	2.00	6.00

CELERY

Silver Giant White Solid	.15	.40	1.40
Boston Market	.15	.40	1.40
Dwarf Golden Heart	.15	.40	1.40
Half Dwarf White Solid	.15	.40	1.40
Giant Paschal	.15	.40	1.40
Dwarf White Solid	.15	.40	1.40
Golden Self Blanching	.30	1.25	4.00
White Plume	.20	.50	1.75
Celeriac (Turnip-rooted)	.10	.30	.90
Flavoring Celery (old seed for flavoring—not for sowing)	.05	.10	.30

Each of the above, **5 cents** per packet

CLOVER—(see pages 1 to 4)

CORN (Sugar)

	QT.	4 QTS.	PECK	BUS.
First of All	.20	.60	1.00	3.50
Early Minnesota	.20	.75	1.25	4.50
Extra Early Adams (not a true sugar)	.20	.60	1.00	3.50
Early Shaker	.20	.75	1.25	4.50
Early Evergreen	.20	.75	1.25	4.50
Egyptian	.20	.75	1.25	4.50
Hickox	.20	.75	1.25	4.50
Black Mexican	.25	.80	1.50	4.50
Crosby's Early	.20	.75	1.25	4.00
Large Late Mammoth	.20	.75	1.25	4.00

CORN (Sugar)—Continued

	QT.	4 QTS.	PECK	BUS.
Improved Stowell's Evergreen	.20	.75	1.25	4.00
Country Gentleman	.20	.75	1.25	4.00
Shoe Peg	.20	.75	1.25	4.00
Kendel's Giant	.20	.75	1.25	4.00
Golden Bantam	.30	1.00	1.75	6.00

CORN (Field)

Eight-rowed Yellow Canada
Mammoth Chester Co.
Golden Beauty
Mammoth Golden Dent
Blount's Prolific
Leaming Early Dent
Mastodon Early Dent
Hickory King
White Ensilage

Prices upon application

CORN SALAD

	OZ.	¼ LB.	LB.
Broadleaved. Pkts., 5 cents	.07	.20	.55

CRESS

Curled	.10	.20	.50
Broadleaved	.10	.20	.50
Water	.30	1.00	3.50

Each of the above, **5 cents** per packet

CUCUMBER

Early Frame	.10	.30	.90
Jersey Prolific	.10	.25	.85
Improved White Spine	.10	.25	.85
Long Green Turkey	.10	.25	.85
Jersey Pickle	.10	.25	.85
Short Green Prolific	.10	.25	.85
Gherkin	.15	.40	1.20

Each of the above, **5 cents** per packet

EGG PLANT

Early Long Purple	.35	1.00	3.50
Improved New York Purple	.35	1.00	3.50
Black Pekin	.35	1.00	3.50

Each of the above, **10 cents** per packet

ENDIVE

Green Curled	.10	.30	.75
Broad-leaved Batavian	.15	.40	1.25

Each of the above, **5 cents** per packet

GRASS SEEDS (See pages 4 to 8)

KALE

Green Curled Scotch	.10	.20	.50
Dwarf German Greens	.10	.20	.50

Each of the above, **5 cents** per packet

KOHL-RABI

Turnip-Rooted Cabbage	.15	.40	1.25

(Packet, 5 cents)

LEEK

London or Flag	.15	.40	1.25
Musselburgh	.15	.40	1.25

Each of the above, **5 cents** per packet

LETTUCE

(Loose-leaved Varieties)	OZ.	¼ LB.	LB.
Early Curled Silesian	.10	.30	1.00
Early Curled Simpson	.10	.30	1.00
(Heading Varieties)			
Large Drumhead	.10	.30	1.00
California Cream Butter	.10	.30	1.00
Blackseeded Tennisball	.10	.30	1.00
Big Boston	.10	.30	1.00
Boston Market	.10	.30	1.00
White Dutch Butterhead	.10	.30	1.00
Royal Cabbage	.10	.30	1.00

Each of the above, **5 cents** per packet

MELON (Water)

Mountain Sweet	.10	.20	.60
Black Spanish	.10	.20	.60
Gipsy or Rattlesnake	.10	.20	.60
Dixie	.10	.20	.60
Kleckley Sweets	.10	.25	.80
Ice Cream	.10	.15	.50
Orange	.10	.15	.50
Light Icing	.10	.20	.65
Dark Icing	.10	.20	.65
Black Boulder	.10	.20	.65
Kolb's Gem	.10	.15	.50
Citron Water (for preserving)	.10	.15	.50

Each of the above, **5 cents** per packet

CANTALOUPE MELON

Netted Nutmeg	.10	.20	.75
Extra Early Rough	.10	.20	.75
Montreal	.10	.20	.75
Jenny Lind	.10	.25	.80
Jenny Lind Improved	.10	.25	.80
Hackensack	.10	.20	.70
Golden Jenny	.10	.25	.80
Rocky Ford	.10	.25	.80
Fordhook or Burrell Gem	.10	.25	.90

Each of the above, **5 cents** per packet

MUSTARD

White	.10	.15	.35
Brown or Black	.10	.15	.35

Each of the above, **5 cents** per packet

NASTURTIUM

Dwarf	.10	.30	.80
Tall	.10	.20	.60

Each of the above, **5 cents** per packet

OKRA

Dwarf	.10	.20	.50
Tall	.10	.20	.50

Each of the above, **5 cents** per packet

ONION

(White)			
Extra Early Pearl	.15	.45	1.50
Silver Skin	.25	.50	1.50
Queen	.15	.50	1.75
White Portugal	.15	.50	1.75
Southport White Globe	.20	.65	2.75

ONION (Continued)

(Yellow and Red)	OZ.	¼ LB.	LB.
Large Yellow Strasburgh	.10	.30	1.15
Yellow Globe Danvers	.15	.40	1.25
Prizetaker	.15	.40	1.25
Extra Early Red	.15	.40	1.25
Red Wethersfield	.15	.40	1.25

Each of the above, **5 cents** per packet

ONION SETS

	QT.	4 QTS.	PECK	BUS.
Yellow	.15	.40	.70	2.25
White	.15	.50	.90	2.40

PARSLEY

	OZ.	¼ LB.	LB.
Plain	.15	.35	1.00
Double Curled	.15	.35	1.00
Moss Curled	.15	.35	1.00

Each of the above, **5 cents** per packet

PARSNIP

Sugar. Pkts., 5 cents each	.10	.25	.50

PEAS

(First Early)	QT.	4 QTS.	PECK	BUS.
Improved Premier Extra Early	.25	.85	1.60	5.75
Mingle's Extra Early	.25	.85	1.60	5.75
Nott's Excelsior	.30	1.00	2.00	7.50
American Wonder	.30	1.00	2.00	7.25
Philadelphia Extra Early	.25	.85	1.60	5.75
Gradus	.35	1.25	2.25	9.50
Sutton's Excelsior	.30	1.10	2.10	8.00
Alaska	.25	.85	1.60	5.75
Laxton's Prolific	.35	1.25	2.25	9.50
Ameer	.30	1.10	2.00	7.25
First and Best	.25	.85	1.60	5.75
(Second Early)				
McLean's Little Gem	.30	1.00	1.75	6.75
McLean's Premium Gem	.30	1.00	1.75	6.75
Advancer	.30	1.00	1.85	7.00
Abundance	.30	1.00	1.85	7.00
Horsford's Market Garden	.30	1.00	1.75	6.50
Fillbasket	.30	1.10	2.00	7.25
(Late)				
Dwarf Champion	.25	.85	1.60	5.75
Everbearing	.30	1.00	1.75	6.50
Pride of the Market	.30	1.10	2.00	7.50
Daisy or Dwarf Telephone	.30	1.10	2.00	7.50
Champion of England	.25	.85	1.60	5.75
Stratagem	.30	1.10	2.00	7.50
Improved Telephone	.30	1.10	2.00	7.50
Long Island Mammoth	.30	1.10	1.85	7.25
Telegraph	.30	1.10	1.85	7.25
Yorkshire Hero	.30	1.10	1.75	6.50
Large White Marrowfat	.25	.80	1.40	5.00
Large Black-eyed Marrowfat	.25	.80	1.40	5.00

PEPPER

	OZ.	¼ LB.	LB
Large Sweet Spanish	.20	.60	2.00
Bullnose	.20	.60	2.00
Ruby King	.20	.60	2.00
Long Red Cayenne	.20	.60	2.00
Sweet Mountain	.20	.60	2.00

Each of the above, **5 cents** per packet

PUMPKIN	OZ.	¼ LB.	LB.
Sweet Potato	.10	.30	.80
Cashaw	.10	.30	.80
Cheese	.10	.25	.60
Common Field	.05	.10	.35

Each of the above, **5 cents** per packet

RADISH

(First Early)			
Early Scarlet Turnip	.10	.20	.50
White Tipped Scarlet Turnip	.10	.20	.50
Early Red Turnip-rooted	.10	.20	.50
French Breakfast	.10	.20	.50
Early Deep Scarlet Turnip-rooted	.10	.20	.50
White Box	.10	.20	.50
Early White Turnip-rooted	.10	.20	.50
Early Scarlet Olive-shaped	.10	.20	.50
(Second Early)			
Early Long Scarlet Short Top	.10	.20	.50
White Ladyfinger	.10	.20	.50
White Summer	.10	.20	.50
Icicle	.10	.20	.50
White Strasburgh	.10	.20	.50
(Winter Radishes)			
Long Black Spanish	.10	.20	.50
Round Black Spanish	.10	.20	.50
Long White Spanish	.10	.20	.60
Scarlet China Winter	.10	.20	.60
White China Winter	.10	.20	.60

Each of the above, **5 cents** per packet

SALSIFY

French	.10	.30	1.00
Sandwich Island	.10	.30	1.00

Each of the above, **5 cents** per packet

SPINACH

Round-leaved Savoy	.10	.15	.30
Bloomsdale	.10	.15	.30
Norfolk	.10	.15	.30
Long Standing	.10	.15	.30
Victoria	.10	.15	.30

Each of the above, **5 cents** per packet

SQUASH

Early White Bush	.10	.25	.70
Golden Summer Crookneck	.10	.25	.70
Golden Scallop Bush	.10	.25	.70
Winter Crookneck	.10	.25	.70
Fordhook	.10	.25	.70

SQUASH (Continued)	OZ.	¼ LB.	LB.
Boston Marrow	.10	.15	.50
Hubbard	.10	.25	.70

Each of the above, **5 cents** per packet

TOMATO

Extra Early Cluster	.10	.50	1.75
Extra Early Globe	.15	.50	1.75
Matchless	.15	.50	1.75
Acme	.15	.50	1.75
Paragon	.15	.50	1.75
Livingston's Perfection	.15	.50	1.75
Livingston's Favorite	.15	.50	1.75
Beefsteak	.15	.50	1.75
Queen	.15	.50	1.75
Earliana	.20	.60	2.00
Large Red	.15	.50	1.75
Red Stone	.15	.50	1.75
Pear-shaped Yellow	.25	.70	2.50
Livingston's Beauty	.15	.50	1.75

Each of the above, **5 cents** per packet

TURNIP

Early Flat Dutch (strapleaved)	.10	.20	.40
Early Flat Purple Top (strap-leaved	.10	.20	.40
Large Early Red Top Globe	.10	.20	.40
Pomeranian White Globe (strap-leaved	.10	.20	.40
Cowhorn	.10	.20	.40
Yellow or Amber Globe (strap-leaved)	.10	.20	.40
Golden Ball	.10	.20	.40
Yellow Aberdeen	.10	.20	.40
Purple Top Yellow Swede (Ruta Baga)	.10	.20	.40
White-fleshed Purple Top Ruta Baga	.10	.20	.40

Each of the above, **5 cents** per packet

HERBS

Dill	.10	.20	.40
Sweet Marjoram	.10	.25	.75
Sage	.15	.45	1.50
Sweet Basil	.10	.25	.75
Summer Savory	.10	.25	.75
Thyme (Packet, 10c. each)	.40	1.25	4.00

Each of the above **5 cents** per packet, except where otherwise noted

FARM SEEDS, FEED, ETC.

Prices approximate only. Fixed quotations given upon application.

ANIMAL REGULATOR, Pratt's, pkge.... .25

ARSENATE OF LEAD, 1-lb. can..... .20

BAG BALM, pkge..... .50

BARLEY, for feeding, bushel (48 lbs.)..... 1.10
" sowing, " (48 ")..... 1.30

BONE MEAL, 5 lbs., 25c.; 10 lbs., 40c.; 25 lbs., 75c.; 100 lbs., $2.00; 200 lbs. 3.50

BROOM CORN, bushel (46 lbs.)..... 1.25

BUCKWHEAT (48 lbs. per bushel)
For feeding, bushel..... .90
" sowing, " 1.10

BUG DEATH, 5-lb. pkge., 50c.; 3-lb. pkge., 35c.; 1-lb. can..... .15

BUG DEATH DUSTERS, tin.....each .25
" " " one-acre-an-hour .....each .60

(See page 15)

CAKE MEAL, 5 lbs., 20c.; 10 lbs., 35c.;50 lbs., $1.20; sack 100 lbs..... 2.25

CANARY, 1 qt., 15c.; 2 qts., 25c.; 4 qts., 45c.; peck, 85c.; bushel (60 lbs.)..... 3.00

CHARCOAL, granulated, sack, 50 lbs. Medium, $1.00; coarse..... 1.00
Two-lb. pkgs., medium, 10c.; coarse..... .10

CHICK FEED, 5 lbs., 20c.; 10 lbs., 30c.; sack (100 lbs.)..... 2.00

CHICK MANNA, 5-lb. pkge., 40c.; 1-lb. pkge. .10

CLOVER (all 60 lbs. per bushel)

Alfalfa.....
Alsike, or Swedish
Crimson.....
Mammoth Red...
Medium Red.....
White Dutch.....
} Prices on application

CONDITION POWDER, Pratt's, per pkge.
Small, 25c.; large..... .50

CORN, whole, for feeding—4 qts., 15c.; peck, 25c.; bushel..... .90
Cracked, for feeding—4 qts., 15c.; peck, 25c.; bushel..... .90
English Yellow Flint, small grain, for pigeons. 5 lbs., 40c.; 10 lbs., 30c.; bush. 1.40

COW PEAS, (60 lbs. per bushel)

Black.....
Black-eye...
Clay.....
New Era....
Soja Beans..
Whippoorwill
} Prices on application

CUT ALFALFA, 10 lbs., 30c.; 100 lbs..... 1.50

CUTTLE-FISH BONE, 2 for 5 c.; lb..... .30

DEVELOPING FEED FOR CHICKENS. 5lbs., 20c.; 10 lbs., 35c.; sack (100 lbs.).. 1.90

DOG BISCUITS, Spratt's. 1lb., 10c.; 3 lbs., 25c.; 25 lbs..... 1.75
Puppy Biscuits, Spratt's. 1 lb., 10c.; 3 lbs., 25c.; 25 lbs..... 1.75

FLAX SEED, bushel..... 2.80

FLAXSEED MEAL, 5 lbs., 20c.; 10 lbs., 35c.; 50 lbs., $1.20; sack (100 lbs.)..... 2.25

FLY SPRAY, 1 qt. can, 40c.; 1 gallon..... 1.00

FOOD FOR CATTLE AND HORSES—
Pratt's, per pkge..... .50

GAPE REMEDY, Pratt's.....pkge. .25

GARGET CURE, per can..... .50

GRASS—

Billion Dollar Grass, bushel (33 lbs.) 1.50
Blus Grass, bushel (14 lbs.)..... 2.50
Creeping Bent, bushel (16 lbs.)..... 3.00
Italian Rye Grass, bushel, $1.80; per lb... .10
Mixed Velvet Lawn, 1 qt., 20c.; 2 qts., 35c.; 4 qts., 60c.; peck..... .75
Bushel (15 lbs.)..... 3.00
Embankment Grass, bushel (15 lbs.)..... 2.25
Hard Fescue, bushel (12 lbs.)..... 2.25
Herds, or Red Top, bushel (10 lbs.)..... 1.10
" " " " recleaned, bu (40 lbs.) 6.00
Orchard, bushel (12 lbs.)..... 2.50
Perennial Rye Grass, bushel (20 lbs.) per lb. .10
Red Fescue, bushel (12 lbs.)..... 2.25
Rhode Island Bent (bushel, 12 lbs.), per lb. .28
Timothy bushel, (45 lbs.). Prices upon application.
Shady Lawn Grass, bushel (15 lbs.)..... 2.70

GRIT—

"XX" RED CROSS HEALTH GRIT, sack (100 lbs.)..... 2.00
Fine, 5 lbs., 10c.; 20 lbs., 30c.; sack (100 lbs.)..... .65
Medium, 5 lbs., 10c.; 20 lbs., 30c.; sack (100 lbs.)..... .65
Coarse, 5 lbs., 10c.; 20 lbs., 30c.; sack (100 lbs.)..... .65

HEMP, 1 qt., 8c.; 2 qts., 15c.; 4 qts., 30c.; peck, 50c.; bushel (40 lbs.)..... 1.50

HORSE COMFORT, pkge..... .25

HORSE TONIC, American, pkge..... .25

KAFFIR CORN, 4 qts., 25c.; bushel (50 lbs.) 1.10

KOW KURE, 1½-lb. can, 50c.; 3¼-lb. can, 1.00
If by mail, postage 13 cents or 29 cents extra.

LICE KILLER, International, pkge..... .25
Pratt's, in pkgs. Small, 10c.; large..... .25
Pratt's Liquid Lice Killer—per can..... .35
Dr. Hess' Lice Killer—1-lb. can, 25c.; 3-lb. can..... .60

MASH FEED, 5 lbs., 20c.; 10 lbs., 30c.; 25 lbs., 50c.; sack (100 lbs.)..... 1.90

MAW SEED, per lb..... .20

MILLET, Bird, 1 qt., 7c.; 4 qts., 25c.; bushel (50 lbs.) 1.10

Japanese Barnyard, per bushel (32 lbs.) ... 1.50
German, bushel (50 lbs.) ... } Prices upon
Hungarian, bushel (48 lbs.) } application

MOLASSES, for feed (in bbls. of 57 gals—per bbl 6.50

NEST EGGS, Porcelain, 2 for 5c.; doz ..... .25
" " Medicated—each, 5c.; doz ... .50

OATS—
Sowing, bushel (32 lbs.) ..... .90

ONION SETS (32 lbs. per bushel)

Silver Skin ..... }
Globe Danvers ... }
Yellow Strasburgh } Prices upon application
Red Wethersfield . }
Winter Onions .... }

OYSTER SHELL, Fine, 5 lbs., 10c.; 20 lbs., 30c.; sack (100 lbs.) ..... .50
Medium, 5 lbs., 10c.; 20 lbs., 30c.; sack (100 lbs.) ..... .50
Coarse, 5 lbs., 10c.; 20 lbs., 30c.; sack (100 lbs.) ..... .50

PARIS GREEN, ¼ lb., 15c.; ½ lb., 25c.; 1 lb ..... .35

PEAS, Canada Field, 4 qts., 25c.; peck, 50c.; bushel (60 lbs.) 1.90

PIGEON FEED, Mingle's Mixture—
5 lbs ..... .20
10 " ..... .30
100 " 2.00

POP CORN, 1 lb., 10c.; 3 lbs ..... .25

POTATOES, in sacks of 2¾ bushels, or 165 lbs. each—

Early Rose ..... }
Carman No. 3 ... }
Houlton Rose .... }
Irish Cobbler ..... } Prices upon application
Rural New Yorker }
Sir Walter Raleigh }
State of Maine ... }

POULTRY FOOD, International, in pkgs.
Small, 25c.; large ..... .50

POULTRY MEAT, or MEAT SCRAPS—
5 lbs., 20c.; 10 lbs., 35c.; sack (100 lbs.) 2.60

POULTRY PANACEA, Dr. Hess'—1½-lb. pkge., 25c.; 5-lb. pkge ..... .60
25 lb. pail 2.50

POULTRY REGULATOR, Pratt's, in pkgs.
Small, 10c.; medium, 25c.; large ..... .50

RAPE SEED—
Bird Rape, 1 qt., 15c.; 2 qts., 25c.; 4 qts., 45c.; peck, 85c.; bushel 3.00
Dwarf Essex (50 lbs. per bushel), per lb .. .10

RAT CORN, package ..... .25

RICE, feeding, 5 lbs., 25c.; sack (100 lbs.) .. 3.50

ROOTS—
Asparagus } When in season
Rhubarb }

ROUP CURE, Pratt's, pkge ..... .25
Dr. Hess'—4-oz. can, 25c.; 10-oz. can .... .50

RYE, Spring, bushel (56 lbs.) 1.25
" Winter, " " " 1.20

SCALE DESTROYER, Target Brand, n cans. Small, 35c.; large 1.00

SCRATCH FEED, 5 lbs., 20c.; 10 lbs., 30c.; sack (100 lbs.) 2.00

SLUG SHOT, Hammond's—5-lb. pkge ... .25

SORGHUM, bushel (50 lbs.) 1.75

SPRAYERS, or ATOMIZERS. Tin, quart size, each ..... .50

STOCK FOOD, International, in pkgs.
Small, 25c.; large ..... .50

SUNFLOWER, 1 qt., 10c.; 2 qts., 15c.; 4 qts., 30c.; peck, 50c.; bushel (25 lbs.) .. 1.50

VETCHES, Spring, (60 lbs. per bush.) per lb. .05
Winter, " " " " " " .09

WEED KILLER, Target Brand, in cans, 1 quart ..... .45

WHEAT (60 lbs. per bushel)
Fulcaster, per bushel 1.50
Fultz, " " 1.50
Longberry, " " 1.50
Winter Fife, " " 1.50

USEFUL TABLES

TABLE SHOWING THE WEIGHT OF VARIOUS ARTICLES

Barley	per bushel, 48 lbs.	Oats	per bushel, 32 lbs.
Beans	per bushel, 60 lbs.	Onion Sets	per bushel, 32 lbs.
Buckwheat	per bushel, 48 lbs.	Orchard Grass	per bushel, 12 lbs.
Broom Corn	per bushel, 46 lbs.	Perennial Rye Grass	per bushel, 20 lbs.
Blue Grass	per bushel, 14 lbs.	Peas	per bushel, 60 lbs.
Clover Seed	per bushel, 60 lbs.	Vetches	per bushel, 60 lbs.
Corn, shelled	per bushel, 56 lbs.	Red Top Grass Seed	per bushel, 10 lbs.
Corn, on the ear	per bushel, 70 lbs.	Rye	per bushel, 56 lbs.
Flax Seed	per bushel, 56 lbs.	Spinach	per bushel, 40 lbs.
Hemp Seed	per bushel, 40 lbs.	Timothy Seed	per bushel, 45 lbs.
Hungarian Grass Seed	per bushel, 48 lbs.	Top Onions	per bushel, 28 lbs.
Millet	per bushel, 50 lbs.	Turnips	per bushel, 55 lbs.
German Millet	per bushel, 50 lbs.	Wheat	per bushel, 60 lbs.

QUANTITY OF SEED USUALLY SOWN UPON AN ACRE

Barley, broadcast	2 to 3 bushels	Onion sets, in drills	6 to 12 bushels
Beans, Dwarf, in drills	1½ bushels	Parsnips, in drills	4 to 6 pounds
Beans, Pole, in hills	10 to 12 quarts	Peas, in drills	1½ bushels
Beets in drills	5 to 6 pounds	Peas, broadcast	3 bushels
Broom Corn, in hills	8 to 10 quarts	Potatoes, cut tubers	10 bushels
Buckwheat	1 bushel	Pumpkin, in hills	4 to 6 pounds
Cabbage in beds, to transplant	¼ pound	Radish, in drills	8 to 10 pounds
Carrots, in drills	3 to 4 pounds	Rye, broadcast	1¾ to 2 bushels
Corn, in hills	8 to 10 quarts	Sage, in drills	8 to 10 pounds
Corn, for soiling	3 bushels	Salsify, in drills	8 to 10 pounds
Cow Peas	½ to 2 bushels	Spinach, in drills	10 to 12 pounds
Cucumber, in hills	2 pounds	Squash, bush varieties, in hills	4 to 6 pounds
Flax, broadcast	1½ bushels	Squash, running, in hills	3 to 4 pounds
Hemp	1½ bushels	Sugar Cane or Sorghum	12 quarts
Mustard, broadcast	½ bushel	Tomato, to transplant	¼ pound
Melon, Musk, in hills	2 to 3 pounds	Turnip, in drills	½ to 2 pounds
Melon, Water, in hills	4 to 5 pounds	Turnip, broadcast	3 to 4 pounds
Oats, broadcast	2 to 3 bushels	Vetches, broadcast	30 pounds
Onion, in drills	5 to 6 pounds	Wheat, broadcast	1½ to 2 bushels
Onion, for sets in drills	30 pounds		

GRASS SEEDS TO THE ACRE

White Clover	10 pounds	Pasture Grass	2½ to 3 bushels
Red Clover	10 to 15 pounds	Blue Grass	1½ to 3 bushels
Alfalfa or Lucerne Clover	20 pounds	Rye Grass	1½ to 2 bushels
Alsike Clover	12 pounds	Orchard Grass	1½ to 2 bushels
Crimson Clover	12 to 15 pounds	Red Top Grass	1½ to 2 bushels
Timothy	12 pounds	Mixed Lawn Grass	5 bushels
Hungarian Grass	1 bushel	Millet	1 bushel

NUMBER OF PLANTS TO THE ACRE

Distance Apart	No. of Plants	Distance Apart	No. of Plants
1 foot by 1 foot	43,560	6 feet by 6 feet	1,210
1½ " " 1½ "	19,360	8 " " 8 "	680
2 feet " 1 "	21,780	10 " " 10 "	435
2 " " 2 feet	10,890	12 " " 12 "	302
2½ " " 2½ "	6,969	15 " " 15 "	193
3 " " 2 "	7,260	18 " " 18 "	134
3 " " 3 "	4,840	20 " " 20 "	109
4 " " 4 "	2,178	25 " " 25 "	70
5 " " 5 "	1,742	30 " " 30 "	48

NUMBER OF PLANTS PRODUCED FROM AN OUNCE

	Plants		Plants
Asparagus	about 500	Kale	ut 2,000
Broccoli	" 2,000	Leek	1,000
Cabbage	" 2,000	Lettuce	3,000
Cauliflower	" 2,000	Pepper	,000
Celery	" 3,000	Tomato	000
Egg Plant	" 1,000	Sage	000
Endive	" 3,000	Thyme	00

ORDER SHEET

BELL TELEPHONE, MARKET 1209

CHAS. R. KOCH
JOHN W. KOCH

P. B. MINGLE CO.

WHOLESALE SEED MERCHANTS

103 MARKET ST. 4 NORTH FRONT STREET

For enclosed $_____ Please forward the following as per terms of your Descriptive Catalog to

Name _____
(Ladies kindly use the prefix Miss or Mrs.)

Rural Route No. _____ Post Office _____

Express Depot _____

Freight Depot _____ R. R. _____

County _____ State _____

State whether to forward by Express, Mail or Freight _____

QUANTITY WANTED	ARTICLES WANTED	PRICE

Kindly give below the names of any friends or neighbors who you think would be interested in receiving our catalog.

NAME	POST OFFICE	STATE

Crimson Clover