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W. H. Tracy, Esq.

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VOGELER
U.S.P.
SEED COMPANY
SALT LAKE CITY, UTAH

Annual
Catalogue
and
Price List
for
1909

To the Trade

Our Terms are Strictly Cash with the Order

We do not send C. O. D., as the cost of collecting return charges is quite an unnecessary item of expense, and the prices being given, we can conceive of no necessity to warrant goods being so sent.

WHEN TO ORDER

We endeavor, when placing our catalogue in the hands of our regular customers, early in January, to have our stock of seeds, etc., complete in every respect; and those of our patrons who favor us with their orders at an early date are sure of receiving prompt attention, and assist us in reducing the heavy strain which always occurs as the season advances. Order early and avoid delays.

DISPATCH OF ORDERS

All orders will be filled promptly, in the order they are received, or a reason given for their non-fulfillment.

FREE DELIVERY BY MAIL

We deliver free at any postoffice in the United States all vegetable and flower seeds offered in this Catalogue by the packet, ounce, quarter pound, pound, pint or quart.

Customers ordering these seeds by the pound, pint or quart, to be sent by freight or express, may deduct 10 cents per pound on vegetable and flower seeds, 10 cents per quart on sweet corn, and 15 cents per quart on beans and peas, from our list prices, except where noted.

When sent in this way the purchaser pays the freight or express charges on receipt of goods.

Purchaser pays express and freight charges, also on pecks and bushels and on all farm seeds, poultry supplies, stock foods, etc.

SAFE DELIVERY OF ORDERS

We guarantee the safe delivery of all orders by express or freight. If a package is lost we will replace it as soon as informed of the fact. It sometimes happens that orders never reach us or are without a signature. When customers fail to receive their goods in a reasonable time they should inform us, and at the same time send a copy of their order.

HOW TO SEND MONEY

Remittances may be made by Postoffice Money Order, Express Money Order, Bank Draft, Express or by Registered Letter. Small amounts may be sent by ordinary mail.

GUARANTEE

Complaints made that seeds are not good, should quite as often be attributed to other causes as to the quality of the seeds. There are hundreds of contingencies continually arising, to prevent the best seeds always giving satisfaction, such as sowing too deep, too shallow, in too wet or too dry soil; insects of all descriptions destroying the plants as soon as or before they appear; wet weather, cold weather, frosts, chemical changes in the seeds induced by temperature, etc. For the above reasons it is impracticable to guarantee seeds under all circumstances.

While we exercise the greatest care to have all seeds pure and reliable, we do not give any warranty, express or implied, as to descriptions, quality, productiveness or any other matter of any seeds we send out, and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these conditions, they must be returned at once.

SEEDS IN PACKETS

We offer the following inducements to those wishing to purchase seeds in packets: Select packets to the value of \$1.15 and send us \$1.00; for \$2.35 send \$2.00; for \$3.60 send \$3.00; for \$4.85 send \$4.00; for \$6.15 send \$5.00; for \$12.50 send \$10.00.

The seeds will be sent by mail, postpaid, but these low rates apply to Seeds in **Packets only**, and at catalogue prices, and not to seeds by weight or measure.

In common with other responsible seed houses, we sell our goods subject to the following disclaimer, it being that adopted by the American Seed Trade Association:
 While we exercise the greatest care to have all Seeds pure and reliable, we do not give any warranty, express or implied, as to description, quality, productiveness or any other matter of any seeds we send out, and will not be in any way responsible for the crop. If the purchaser does not accept the goods on these conditions, they must be returned at once.

Order Sheet for PURITY SEEDS

FROM
VOGELER SEED CO., SALT LAKE CITY, UTAH

No Goods Sent C. O. D. Our Terms are Cash with All Orders.

HOW TO SEND MONEY

Remittances may be made by P. O. Money Order, Express Money Order, Bank Draft, Express, or by Registered Letter. Every postmaster is required to register any letter on payment of 8 cents extra charge.

When notes are not obtainable, or to make proper change, we accept postage stamps the same as cash. Any denomination will be accepted, but we prefer our customers to send two-cent stamps when convenient, as we use more of these than any other.

Names of persons and places, though familiar to writers, are often puzzling to others, hence please be particular to write your name and address distinctly and in full with each order. We are continually receiving orders where this is neglected, and are obliged to retain them until we hear again from the writer.

DIRECTIONS FOR ORDERING

SEEDS POSTPAID BY MAIL.

At prices quoted in this Catalogue, we send all Vegetable Seeds by the packet, ounce, quarter-pound, pound, pint and quart, and all Flower Seeds by Mail, postage prepaid, without any extra expense to the purchaser. They do not, however, include delivery charges on larger quantities. If you order Vegetable Seeds by the pound, and Beans, Peas and Corn by the pint or quart, to be sent by freight or express, at your expense, you are entitled to deduct 10 cents per pound on Vegetable Seeds, 10 cents per quart on Sweet Corn and 15 cents per quart on Beans and Peas from prices quoted.

Extra Order Sheets and Return Envelopes Sent on Application.

FORWARD BY { State on this Line whether wanted }
 by Mail, Express or Freight }

YOUR NAME,

POST-OFFICE,

COUNTY,

STATE,

EXPRESS OR }
 FREIGHT OFFICE }

DO YOU GROW FOR MARKET OR HOME USE?

Amount Enclosed.

Post-Office Money Order, \$

Express Money Order,

Bank Draft

Cash, Notes and Silver,

Postage Stamps,

(2c stamps preferred)

Total, \$

DATE, 190.....

Bushels. Quarts. Pints. Pounds. Ounces. Packets.

NAMES OF SEEDS WANTED.

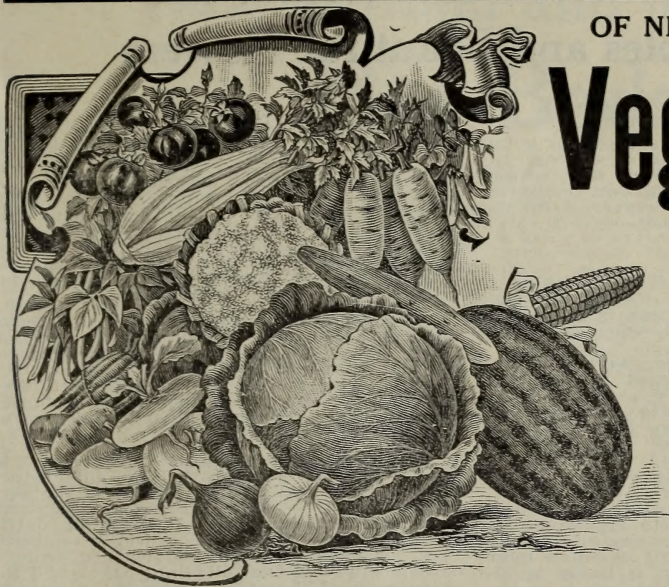
PRICE

Dollars. Cents.

AMOUNT CARRIED OVER.

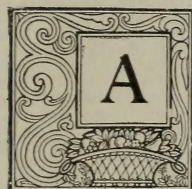
DESCRIPTIVE LIST

OF NEW AND CHOICE



Vegetable Seeds

SEASON
1909



AS is our usual custom, we are pleased to submit our annual catalogue, and to assure our patrons that we highly appreciate their confidence and continued support, and especially do we thank them for their kind recommendations and liberal orders during the past year, which has resulted in a very satisfactory increase in our business. Quality is always our first consideration. We exercise the greatest care in the selection, storing and handling of our seeds, thereby insuring their purity and high germinating power. We assure our customers that it shall ever be our aim to merit their patronage, by supplying them with the very best seeds it is possible to obtain, at as reasonable prices as first class seeds can be sold.

Our catalogue is carefully rewritten each season, and practical up-to-date information is given as to the most profitable crops and the best methods of growing them. Gardeners, truckers and farmers will find it a most valuable reference book all through the year. As a guide for amateurs to whom the long list of varieties might be confusing, we have marked thus (☐) those that we consider the best of their respective types for general cultivation.

Trusting that the New Year will bring an increased measure of prosperity and happiness to all our friends and customers, we remain,

Respectfully yours,

"Purity Seeds"

VOGELER SEED CO.

The Essentials to the Production of Choice Vegetables and Beautiful Flowers

GOOD SOIL.

A rich, sandy loam is the best, but a fair degree of success may be secured from any soil which can be made rich and friable. Good vegetables cannot be grown on barren sand, a cold, hard, lumpy clay, nor in the shade of orchard or other trees.

LIBERAL MANURING.

A soil which does not need enriching in order to produce the best results is rarely found, and very often success is in proportion to the liberality with which fertilizers have been used.

Well decomposed stable manure, where straw bedding has been used, is the best; that where sawdust is used is not so good. Often wood ashes, at the rate of one peck up to one bushel to the square rod, will be of great benefit. Commercial fertilizers are excellent, and may be used at the rate of four to twelve pounds to the square rod, and the more concentrated forms—such as Nitrate of Soda, Guano, Dried Blood and Potash Salts—at the rate of one to six pounds to the rod. A mass or lump of any of the commercial fertilizers, even if it is but a quarter of an inch in diameter, is liable to kill any seed or young plant which comes in contact with it, so it is very important that they be thoroughly pulverized and mixed with the soil.

THOROUGH PREPARATION.

Rich soil and liberal manuring will avail little without thorough preparation. The soil must be made friable by thorough and judicious working; if this is well done all that follows will be easy; if it is neglected, only partial success is possible, and that at the cost of a great deal of hard work. The garden should be well plowed or dug to a good depth, taking care, if it is a clay soil, that the work is not done when it is too wet. If a handful from the furrow moulds with slight pressure into a ball which cannot be easily crumbled into fine earth again, the soil is too wet, and if stirred then will be hard to work all summer. The surface should be made as fine and smooth as possible with the harrow or rake. It is generally necessary to plow the whole garden at once, and to do this in time for the earliest crops, but the part which is not planted for some weeks should be kept mellow by frequent cultivation.

GOOD SEEDS, PROPERLY PLANTED.

There is no more prolific source of disappointment and failure among amateur gardeners than hasty, careless or improper sowing of the seed. The seed consists of a minute plant, minus the root, with a sufficient amount of food stowed in or around it to sustain it until it can expand its leaves, form roots and provide for itself, the whole inclosed in a hard and more or less impervious shell. To secure germination, moisture, heat and a certain amount of air are necessary. The first steps are the softening of the hard outer shell and the leaves of the plant from the absorption of water, and the changing of the plant food from the form of starch to that of sugar. In the first condition the food is easily preserved unchanged, but the plant cannot use it, while in its sugary condition it is easily appropriated but perishable, and if not used it speedily decays itself and causes decay in the plant.

A dry seed may retain its vitality and remain unchanged for years, but after germination has commenced, a check of a day or two in the process may be fatal. There is no time in the life of a plant when it is so susceptible of fatal injury from the overabundance or want of sufficient heat and moisture as at that between the commencement of germination and the formation of the first true leaves, and it is just then that it needs the aid of a gardener to secure favorable conditions. These are:

First—A proper and constant degree of moisture. The soil should always be moist, never wet. This is secured by making the surface of freshly dug soil so fine and the pressing it over the seeds so firmly with the feet or the back of the hoe, that the degree of moisture remains as nearly uniform as possible.

Second—A proper degree of heat, secured by sowing the seed when the temperature of the soil is that most favorable to the germination of the seed of that particular plant. Too high a temperature is often as detrimental as one too low. The proper temperature for each sort may be learned from a careful study of the following pages and the experience of the most successful gardeners in your vicinity.

Third—Covering the seed to such a depth that while a uniform degree of heat and moisture is preserved, the necessary air can readily reach the germinating seed, and the tiny stem push the forming leaves into the light and air. This depth will vary with different seeds and conditions of the soil, and can be learned only from practical experience. In general, seeds of the size of the turnip should not be covered with more than half an inch of earth pressed down, while corn may be an inch, beans one to two inches, and peas one to four inches deep.

Fourth—Such a condition of soil that the ascending stem can easily penetrate it, and the young roots speedily find suitable food. We can usually secure this by thorough preparation of the ground, and taking care **never to sow fine seeds when the ground is wet.** Occasionally a heavy or long continued rain followed by a bright sun will so bake and crust the surface that it is impossible for the young plant to find its way through it, or a few days of strong wind will so dry the ground that the young plants will be killed. In such cases the only remedy is to plant again.

JUDICIOUS CULTIVATION.

Not only should every weed be removed as soon as it appears, but the crust which forms after a rain should be broken up and the ground stirred as soon as it is dry enough to permit it. The more frequently and deeply the soil is stirred while the plants are young, the better, but as they develop and the roots occupy the ground, cultivation should be shallower, until it becomes a mere stirring of the surface. We have seen hundreds of acres of vegetables where the yield and quality have been materially lowered by injudiciously deep and close cultivation after the roots of the plants had fully occupied the ground. A very small garden, well cultivated and cared for, will give larger returns and be in every way more satisfactory than a much larger one poorly prepared and neglected.

How to Build and Manage Hot Beds

FOR early vegetables some provision for starting certain plants earlier than can be done in the open air is desirable; for this purpose nothing is better than a good hot-bed, and its construction is so simple and the expense so slight that every garden should have one. A hot-bed proper not only protects the plants from the cold, but supplies **bottom heat**. By this term the gardener means that the soil is constantly kept several degrees warmer than the air above, that being the condition, so far as heat is concerned, which is most favorable for rapid and vigorous growth, and gardeners usually secure it by making a compact pile of some fermenting material and covering it with the earth in which the plants are to grow.

HEATING MATERIAL.—The best heating material that is easily available is **fresh** horse manure, containing a liberal quantity of straw bedding. Such manure, if thrown into a loose pile, will heat violently and unevenly, and will soon become cold. What is wanted in the hot-bed is a steady and moderate but lasting heat. To secure this, the manure should be torked over, shaken apart and, if dry, watered and allowed to stand a few days and then be forked over again, piled and allowed to heat a second time, the object being to get the whole mass into a uniform degree of fermentation, and as soon as this is accomplished it is fit for use.

SASH.—Gardeners commonly use sash made especially for hot-beds, and glazed with small lights cut from odds and ends, and so furnished at very low rates. Such sash can usually be procured in any of our large cities, and costs much less than if made to order. For garden use, however, we much prefer a smaller sash that can be easily handled, and the use of larger and better glass. We would recommend that for home gardens, the sash be about two and one-half by four or five feet, and that the glass be not less than 10x14, laid with not more than one-quarter inch lap. In giving the order to one unaccustomed to the work, it would be well to state what they are to be used for, and that they need to be made like skylight sash.

THE FRAME.—This may be made of sound one-inch lumber, the back twelve to fourteen inches high, the front ten to twelve. It should be well fitted to the sash, so as to leave as little opening as possible and yet allow the sash to be easily moved up and down, even when the frame is quite wet.

THE SOIL.—This should be **light, rich, friable**. Any considerable amount of clay in it is very objectionable. If possible it should be unfrozen when put into the bed; for this reason, it is much better to prepare in the fall before, and cover the pile with enough coarse manure or straw to keep out the frost.

MAKING THE BED.—This requires careful attention, as future success depends largely upon the manner in which this work is done. Having cleared away snow and ice, build a rectangular bed one foot larger each way than the frame to be used, carefully shaking out and spreading each forkful and

repeatedly treading down the manure so as to **make the bed as uniform as possible in solidity, composition and moisture**. It is of the **utmost importance** that this shaking apart and evenly pressing down of the manure should be carefully and thoroughly done; unless it is, one portion will heat quicker than the others, and the soil will settle unevenly, making it impossible to raise good plants. The proper depth of the bed will vary with the climate, season and the kind of plants to be raised. A shallow bed will quickly give a high temperature, which will soon subside; a deeper one, if well made, will heat more moderately, but continue much longer. For general purposes, a bed about two feet deep will be best.

The bed completed, the frame and sash may be put on, and fresh manure carefully packed around the outside to the very top—if the weather is at all severe, this outside banking should be replenished as it settles. The bed should then be allowed to stand with the sash partly open for a day or two to allow the steam and rank heat to pass off. The earth should then be put on and carefully leveled. Care should be taken that the soil is dry and friable. If wet or frozen soil must be used, it should be placed in small piles until well dried out before spreading. The heat at first will be quite violent, frequently rising to 120 degrees; but it soon subsides, and **when it reaches** to 90 degrees the seed may be planted. The importance of using dry soil and allowing the first rank heat to pass off is very great. Every season thousands of hot-beds fail of good results from these causes, and seedsmen are blamed for failure resulting from overheat, or wet or soggy soil.

MANAGEMENT OF THE BED.—The essentials for success are a steady, uniform degree of heat and moisture; keeping the soil at all times a few degrees warmer than the air, and the careful "hardening off" (by exposure to the air and diminishing the supply of water) of the plants before transplanting into the open air. Simple as these may seem to be, there are many difficulties in the way of securing them, prominent among which are overheating the air under a bright sun. Without experience one would scarcely believe how quickly the temperature inside of a well-built hot-bed will rise to 90 or 100 degrees upon a still, sunny day, even when the temperature outside is far below freezing, or how quickly the temperature will fall to that outside, if upon a windy, cloudy day the sash is left open ever so little. A rush of cold air driven over the plants is far more injurious than the same temperature when the air is still. Again, in cloudy weather a bed will go several days without watering, but will dry up in an hour when open on a sunny day. The details of management, however, must be learned by experience, but may be easily acquired by one who gives the matter careful attention, keeping constantly in mind the essentials given above.

A COLD FRAME is a simple construction of boards for wintering over young plants—Cabbage, Lettuce, Cauliflower, Broccoli, etc.—and is also extremely useful to protect and

Hot Beds

CONTINUED.

harden off plants from the greenhouse or hot-bed before fully exposing them in the open air.

Select a dry, southern exposure, form a frame from four to six feet wide and as long as required. The back should be fourteen to eighteen inches high, and the front eight to twelve, with a cross-tie every three feet. The frame may be covered with sash or cloth. Seeds of the vegetable to be wintered, sown in open border early in September, will be ready to plant in cold frames about the last of October. The soil should be well prepared and smoothly raked before planting. Admit air freely on pleasant days, but keep close in severe weather.

These frames are particularly useful in the South, and may be covered more cheaply with cloth shades than by sash. The shades are made as follows: Make light but strong wooden frames to fit over the bed, and of a width to receive some common brand of cotton cloth. The cloth may be unbleached and should be stretched over and securely tacked to the frames. We have found that Plant Bed Cloth is superior to any ordinary cloth for this purpose.

TRANSPLANTING. — In transplanting, the main points to be regarded are: Care in taking up the plants, so as to avoid injury to

the roots, planting firmly so as to enable the plant to take a secure hold of the soil, reducing the top to prevent evaporation, and shading to prevent the hot sun from withering and blighting the leaves. In transplanting from a hot-bed, harden the plants by letting them get quite dry a day or two before but give an abundance of water a few hours before they are taken out. It is most apt to be successful if done just at evening, or immediately before or during the first part of a rain—about the worst time being just after a rain, when, the ground being wet, it is impossible to sufficiently press it about the plant without its baking hard. If water is used at all, it should be used freely, and the wet surface immediately covered with dry soil.

WATERING.—The best time to water plants is between sunset and sunrise. Water may be given to the roots at any time, but should never be sprinkled over the leaves while they are exposed to bright sunshine. If watering a plant has been commenced, continue to supply it as needed, or more injury than good will result from what has been given. A copious watering is better than many scanty sprinklings. The ground should always be stirred with a hoe or rake as soon after watering as it can be done without making the soil muddy.

FROM "PURITY SEEDS" FINE VEGETABLES GROW.

ARTICHOKE S

There are two distinct types of artichokes, known respectively as Jerusalem and Globe. The former is a tuberous rooted sunflower; the latter a member of the same botanic family, but grown exclusively for its flower buds.

Culture.—Sow in hot-beds in February or March, and transplant so as to give plenty of room until danger of frost is over. Then set in very rich, well-drained soil in rows four feet apart and two feet apart in the row. The plants can be raised in seed beds out of doors, but in that case will not be likely to produce heads the first year. The edible portion is the undeveloped flower heads, which are produced from about September 1st until frost. Late in the fall cut off the old tops and thoroughly protect the crowns with leaves or straw, to prevent severe freezing. The second year thin the starting shoots to three of the best, which will commence to form heads about July 1st. The plants may also be blanched like Cardoons. This is accomplished by cutting back in July the stems close to the ground; the rapidly growing shoots which then start up may be tied and blanched like Celery. As Artichoke plants do not yield satisfactorily after three or four years, it is best to start a new plantation at least as often as once in three years.

Large Green Globe or Paris

A table vegetable of very high merit. Perennial. The best sort for general use. Buds large, nearly round; scales pale green, shading to violet at the base; very thick and fleshy. This is the French Artichoke, the large flower buds of which are so highly esteemed by epicures, and is very different from the plant cultivated for its fleshy roots or tubers. Pkt. 5c; oz. 30c; ¼ lb. \$1.00; lb. \$3.50.

Jerusalem

Hardy perennial. This variety is not grown from seed, but from roots or tubers. They are sometimes used as a vegetable and for pickling, but their greatest value is for feeding of stock, being particularly desirable for hogs, making an enormous yielding, healthy and nutritious food. Plant and cultivate as potatoes. Seed tubers: 1 lb. 20c; peck \$1.25; bu. \$4.00.

ASPARAGUS

Asparagus is one of the earliest spring vegetables, and would be in universal use were it not for the mistaken idea that it is difficult to grow. In reality it can be produced very easily and cheaply. It does best in a moist, sandy soil, but can be grown in any garden by following the directions given here. A bed 15x50 feet, requiring about 100 plants, should give an abundant supply for an ordinary family.

Culture.—Beds are usually formed by setting plants one or two years old, which can be procured of us. If you wish to grow plants yourself, pour hot, but not boiling, water on the seed and let stand until cool; pour it off and repeat two or three times with fresh hot water. Then sow in drills one foot apart and two inches deep, in light, rich soil. When the plants are well up, thin to about one inch apart, and give frequent and thorough cultivation during the summer. If this has been well done, the plants will be fit to set the next spring. The permanent beds should be prepared by deep plowing, or spading, and thoroughly enriching the ground with stable manure or other fertilizer. If the subsoil is not naturally loose and friable, it should be made so by thoroughly stirring with a subsoil plow or the spade. Set the plants about four inches deep and one or two feet apart in rows four to six feet apart. After the plants are well started, give frequent and thorough cultivation. Early the next spring spade in a heavy dressing of manure, and one quart of salt to each square rod and cultivate well as long as the size of the plants will permit, or until they begin to die down. The next season the bed may be cut over two or three times, but if this is done all the shoots, no matter how small, should be cut. After the final cutting, give a good dressing of manure, ashes and salt. Cultivate frequently until the plants meet in the rows. In autumn, after the plants are fully ripe and yellow, they should be cut and burned. If well cultivated and manured, the bed should give a full crop the following season and continue productive for eight or ten years.



CONOVER'S COLOSSAL.

Barr's Mammoth

Excels all others in tenderness, flavor, productiveness and good appearance. The stalks are very large, frequently an inch in diameter, with few scales; the stalks retain their thickness completely up to the top of the shoots, and have close, round heads. They are extra quick growing, very tender and succulent, entirely free from woody fiber, and make shoots fit for market in a single day. **Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 70c.**

Conover's Colossal ¶

The standard variety. A mammoth green sort of the largest size and of good quality. Produces more stalks to the root than any other kind. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.**

Palmetto

A favorite with truckers. Not quite as prolific as Conover's, but is a little earlier and makes larger stalks. **Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.**

BEANS

Culture.—No crop responds more readily to good soil and cultivation than this. The soil best adapted to it is a light, rich, well drained loam, which was manured for the previous crop. If too rank manure is used it is apt to make the plant run too much to vine. Beans are extremely sensitive to both cold and wet, and it is useless to plant them before the ground has become dry and warm. The largest returns will result from planting them in drills from two to three feet apart, and leaving the plants two to six inches apart in the row. Up to the time of blossoming they should have frequent shallow cultivation, but any cutting of the roots after the plants come into bloom is likely to cause the blossoms to blast and so cut off the crop. Remember that the cultivation of beans should always be very shallow, and that it is useless to expect a crop from a field so poorly prepared as to need deep stirring after planting.

Varieties should be selected so as to give a succession both of string beans and green shelled beans. The wax podded beans are particularly likely to run off into green podded plants, and it requires constant attention and skillful selection to keep them pure. Hence it is especially important to use seed from reliable sources only.

BEANS—Continued

DWARF, BUSH OR SNAP BEANS

Yellow or Wax Podded Varieties

Improved Rust Proof Golden Wax ☞

An improvement on the Golden Wax, which we no longer catalogue, on account of its liability to rust. This new strain has more vigor than its parent, hence its name. The pods are round and succulent, and are borne in profusion. We commend it to the public as a superior wax bush bean.

Pkt. 10c; pt. 30c; qt. 50c, postpaid. Pk. \$2.00; bu. \$7.50.



Challenge Dwarf Black Wax

Continued experience has satisfied us of the great merit of this variety. Its enormous demand proves that it meets popular requirements and has all the sterling qualities we claim for it.

In all our many comparisons of this bean with other extra early sorts, we have found it to be unexcelled in quality and the first to give a full picking of pods.

The Best Early Wax Bean for the Market Garden

In growth and general appearance the plants are the same as the old Black Wax or Butter Bean, but are earlier and more productive. The pods are clear waxy-white, quite round, very fleshy, crisp, tender and stringless. The dry bean is jet black, longer, more curved and flatter than the prolific German Wax.

Pkt. 10c; pt. 30c; qt. 50c, postpaid. Pk. \$2.25; bu. \$8.00.



IMPROVED RUST-PROOF GOLDEN WAX.

Davis Wax

THIS IS THE MOST HARDY AND PRODUCTIVE BUSH WAX-PODDED BEAN IN CULTIVATION.

All of the pods are very long, white, straight and handsome. The vine is rustless and very vigorous, bearing near the center many clusters, some of which extend above the foliage. When young, the pods are very brittle, crisp and tender. The dry beans are kidney-shaped, clear, white and excellent for baking. **ONE of the BEST for SHIPPING as SNAP BEANS**, and of the greatest value for either the market or the home garden. The length, perfect shape and fine color of the pods, and the clear, white seed, make this

ONE OF THE BEST FOR CANNERS.

It is just what they want—a long, straight, clear white pod, which does not discolor in canning. Pkt. 10c; pt. 30c; qt. 50c, postpaid. Pk. \$2.00; bu. \$7.50.

New Prolific German Wax ☞

We are so thoroughly satisfied with this improved strain of Black Wax that we have discarded the old stock altogether, this being more vigorous and far more productive, with a longer, whiter, more fleshy pod. Vines medium sized, very vigorous and hardy. Flowers reddish-white or purple. Pods medium length, borne well up among the foliage, curved, cylindrical, fleshy and of clear, waxy-white color, with long, slightly curved point; remain a long time in condition for use as snaps. Beans small, oblong, jet black. No one can afford to plant the old Black Wax or Butter Beans, as this is much better in every respect.

Pkt. 10c; pt. 30c; qt. 50c, postpaid. Pk. \$2.00; bu. \$7.50.

BEANS—Continued

Wardwell's Kidney Wax

The very strong growing vines of this variety yield a large crop of long, nearly straight, very white, wax-like, handsome pods. These are of good quality and always command a ready sale, making this sort one of the most profitable for the market gardener. The dry beans are large, kidney-shaped, white, with dark markings about the eye. Pkt. 10c; pt. 30c; qt. 50c, postpaid.

Pk. \$2.25; bu. \$8.50.



WARDWELL'S KIDNEY WAX

**Green Podded
Sorts**

**Earliest Improved Round Pod
Red Valentine ♣**



EARLIEST IMPROVED ROUND POD RED VALENTINE.

For snaps there is nothing superior to this variety among the older green podded sorts, and many prefer it to the wax varieties. Vine erect, with coarse, dark green leaves, and large white blossoms; pods medium length, curved, cylindrical, with crease in back; very fleshy, crisp and tender; beans medium sized, long, irregular, pink, marbled with red. We know of no stock of Red Valentine which can be compared with that we offer in tenderness and high quality of pod. It is as early as the earliest. Many different strains of Valentine are offered under slightly varying names, each claiming to be a great and distinct improvement. We have carefully examined them all, both in trials and in large fields, and have round none that we are willing to substitute for our old stock, which combines in a high degree all the good qualities of the sort.

Pkt. 10c; pt. 25c; qt. 40c, postpaid. Pk. \$1.75; bu. \$6.00.

PLEASE NOTE.—When beans by the pint or quart are ordered by express or freight 8 cents per pint or 15 cents per quart may be deducted from prices quoted. Pecks and bushels are sent by express or freight at purchasers' expense.

"PURITY SEEDS" Produce Best Crops

BEANS—Continued**Extra Early Refugee**

A very early, green-podded kind, furnishing a fleshy pod of fine quality. The vines are a little smaller and more upright growing and the leaves distinctly lighter colored than those of the late Refugee, though the dry beans are much the same in shape and color. Our stock has been selected with great care, and is uniform. All the vines ripening their pods well together and long before those of the common Refugee are usable. **Pkt. 10c; pt. 25c; qt. 40c, postpaid. Pk. \$1.75; bu. \$6.00.**

New Stringless Green Pod ☐**A TRUCKER'S TREASURE.**

The New Stringless Green Pod is now one of the most popular bush beans in America. In point of earliness it ranks among the first; in quality it is excelled by none, and in bearing ability it stands without a rival. It is unquestionably the greatest green pod bean to date. As to brittleness of pod, the point suggested by its name, its merit is so high that its enthusiastic friends claim that it is

THE ONLY REALLY STRINGLESS GREEN POD BEAN IN CULTIVATION.

The pods are full, fleshy and nearly straight, and are borne in abundance through a long season, beginning early. They are $5\frac{1}{2}$ to $6\frac{1}{2}$ inches in length, light green in color, very tender, and of highest and best flavor. They remain long in edible condition, and the plant or bush bears continuously for weeks. This bean is unexcelled for home use, and will be found very profitable for market; it has already taken great hold with market gardeners, on account of its heavy-cropping ability. The testimony in regard to it is all in one direction, and all highly flattering. **Pkt. 10c; pt. 25c; qt. 40c, postpaid. Pk. \$1.75; bu. \$6.00.**



NEW STRINGLESS GREEN POD.

PLEASE NOTICE

We do not pay the freight on beans, peas or sweet corn at prices quoted by peck or bushel.

Royal Dwarf Kidney

Plant large, branching, with large, broad leaves and white flowers, pods medium sized, dark green, coarse; beans large, white, kidney-shaped, slightly flattened and of excellent quality, green or dry. **Pkt. 10c; pt. 25c; qt. 40c, postpaid. Pk. \$1.75; bu. \$6.00.**

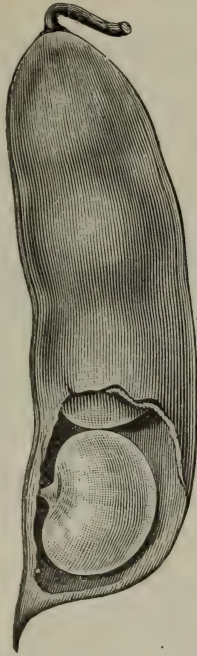
Broad Windsor

(ENGLISH DWARF OR BROAD.) This is entirely distinct from the common, or French, bean. The large, coarse pods are borne on stout plants, which are coarser, more erect and less branched than those of the French bean.

Pkt. 10c; pt. 25c; qt. 35c, postpaid. Pk. \$1.25; bu. \$4.50.

LIMA BEANS**Burpee's Bush Lima** ☐

This is the only bush form of the True Large Lima Bean. First introduced in 1890. It is universally pronounced the most valuable novelty ever introduced. There is absolutely nothing to compare with it. Burpee's Bush Lima comes absolutely true from seed. The bushes grow eighteen to twenty inches high, of stout growth and always erect, yet branching so vigorously that each plant develops into a magnificent circular bush from two to three feet in diameter. It is an immense yielder, the handsome large pods being well filled with very large beans, identical in size and luscious flavor with the well-known large Pole Limas. **Pkt. 10c; pt. 30c; qt. 45c, postpaid. Pk. \$2.00; bu. \$7.50.**

BEANS—ContinuedHenderson's
Bush Lima.**Henderson's Bush Lima**

While the beans are small (being of the **Sieva** or **Sewee** type, known in the South as "butter beans"), yet they are ready for the table earlier than the Large Lima, and the little pods, growing in clusters, are plentiful. The compact, dwarf bushes are of hardy growth and very prolific. Each bush generally matures from forty to eighty pods, while under extra cultivation specimen plants have been raised which bore two hundred.

Pkt. 10c; pt. 30c; qt. 45c, postpaid. Pk. \$2.00; bu. \$7.50.

POLE OR RUNNING BEANS

Culture.—Pole Beans are even more sensitive to cold and wet, as well as to droughts and hot winds, than the dwarf varieties, but are of superior quality and productiveness. After settled warm weather, set poles four to eight feet long in rows four feet apart and extending north and south, the poles being three feet apart in the row. Let the poles slant slightly toward the north. Set in this way, the vines climb better 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 see that they all climb around the pole in the same way, for they will not grow if tied up in the opposite direction. Another plan is to plant in rows thickly enough so that there will be one plant to eight or ten inches. Set posts five feet high firmly at each end of the rows and drive stakes made of 2x2 lumber at intervals of sixteen feet along the rows. Stretch a wire, size No. 10 or 12, between posts along each row, and fasten it to the tops of the stakes in the row with wire staples. Run a light wire or twine along the row about six inches from the ground and fasten to the posts or stakes with wire staples. Tie twine to the wire above the wire or twine below, wherever there is a plant. The vines will run up these until they reach the top wire, when they will care for themselves. Another way is to omit the bottom wire and stick small stakes two to six inches in the soil and fasten to top wire.

Mammoth Podded Horticultural

Similar in general character to the London Horticultural, but larger in every way. The mammoth pods are striped and splashed with exceedingly brilliant crimson. The beans, when fit for use, are of immense size and of the finest quality, and when dry are colored and marked in the same way as the pods.

Pkt. 10c; pt. 30c; qt. 50c, postpaid. Pk. \$2.25; bu. \$8.00.

BEANS—Continued

Lazy Wife's ☞

We presume it derived its name from its immense productiveness, and from the ease with which they are cooked. The pods, of medium dark green color, are produced in great abundance, and measure from four and a half to six inches in length; they are broad, thick, very fleshy and entirely stringless. The pods retain their rich, tender and stringless qualities until nearly ripe, and at all stages are unsurpassed for snap-shorts, being peculiarly luscious. Many persons have testified that they never ate a bean quite so good in distinct rich flavor. Each pod contains from six to eight round, white beans, which make excellent winter shell beans.

Pkt. 10c; pt. 30c; qt. 45c, postpaid. Pk. \$2.00; bu. \$7.50.



LAZY WIFE'S

Old Homestead or Kentucky Wonder ☞

This most popular variety is an improved large podded strain of the Southern Prolific. The pods, usually seven inches or more in length, are so fleshy that they are greater in width than in breadth, being deeply creased or "saddle-backed." They are solidly meaty, entirely stringless, and of finest quality. If kept gathered as they mature, the vines will continue to bear to the end of the season.

Pkt. 10c; pt. 30c; qt. 45c, postpaid. Pk. \$2.00; bu. \$7.50.



KENTUCKY WONDER.

White Creaseback, or Best of All

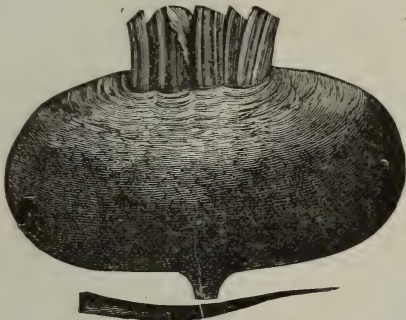
This is the earliest and best early green podded bean for snap-shorts. It is of rapid growth and very productive. Pods grow in clusters and are from five to six inches in length, perfectly round, being deeply creased or "saddle-backed." They are solidly fleshy, entirely stringless and of the finest quality. The dry seed is pure and white and excellent for winter use.

Pkt. 10c; pt. 30c; qt. 45c, postpaid. Pk. \$2.00; bu. \$7.50.

Sow "PURITY SEEDS"—there are None Better

BEEETS

Culture.—The best results are obtained on a deep, rich, sandy loam. If wanted very early sow in hot-beds and transplant, cutting off the outer leaves. For general crop sow as soon as the ground will permit in drills eighteen inches apart and thin out to three inches in the row. For winter use, the turnip varieties may be sown in June, and the beets may be kept by storing in a cellar and keeping covered with sand, or sandy soil, to prevent wilting, or they may be kept outdoors in pits such as are used for apples and potatoes. One or two ounces, or single packets, of two or three sorts, will give a good supply for a large family. It is best to sow in freshly prepared soil, which should be pressed firmly over the seed.



EXTRA EARLY EGYPTIAN BLOOD TURNIP.

Extra Early Egyptian Blood Turnip

The best variety for forcing, and excellent for first early crop out of doors, being very early, with small top. Leaf stems and veins dark red, leaf dark green, dotted with red, roots very dark red, rounded on top, but flat beneath, with very small tap roots, flesh dark red, zoned with lighter shade, hard, crisp and tender when young, but becoming woody with age.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 55c.



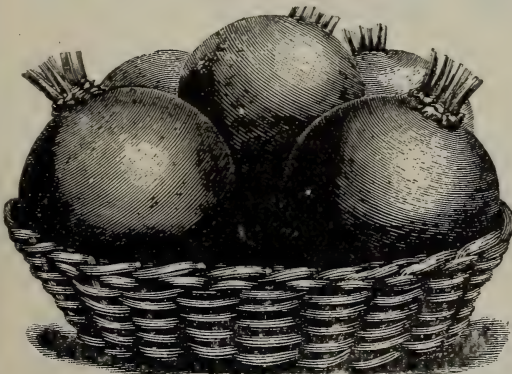
CROSBY'S EGYPTIAN.

Crosby's Egyptian

The name of this variety is misleading, as it resembles the Egyptian only in its extreme earliness. It is a larger, lighter colored and more nearly spherical; one of the best for early planting out of doors. It is a most excellent sort, becoming fit for use sooner than any other variety, but it is not as well suited for forcing in hot beds or for transplanting as the Egyptian.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.

Detroit Dark Red Blood Turnip



DETROIT DARK RED BLOOD TURNIP.

Long experience has shown this variety to be the best deep red turnip beet, not only for market gardeners, but for home use. It is also by far the best for canning, making a strikingly handsome product, much superior to that obtained from any other variety. Its small, upright-growing tops, early maturing, and the splendid shape and color of the roots, make it popular with every one who plants it. Tops small, upright-growing, so that the rows may be close together; leaf stems and veins dark red, blade green; roots globular or ovoid, peculiarly smooth; color of skin dark blood-red; flesh bright red, zoned with a lighter shade; very crisp, tender and sweet, and remaining so for a long time. We believe that the stock of this variety which we offer will produce a crop more uniform in shape, color and quality than any other beet seed obtainable.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 65c.

BEETS—Continued

Early Eclipse Blood Turnip ¶

Tops small, dark purplish-green, shading to lighter color outside of leaves. Roots nearly globular, with a small tap root and very small collar. Flesh dark red, zoned with a lighter shade, very sweet, crisp and tender, especially when young.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.

Bastian's Half Long Blood

This is an entirely distinct variety and by far the best for winter use. The deep red roots are very symmetrical, two or three times as long as thick and always smooth and handsome. The flesh is rich dark red, very sweet, crisp and tender, never becoming woody, even in portions above the ground, and retains its good quality longer than other sorts. We consider this the most valuable variety for winter and spring use.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.

Improved Long Dark Blood ¶

Tops large, necks small, leaf stems and veins red, leaf green, roots large, tapering, growing even with the surface, flesh dark red, zoned with lighter shade, very tender and sweet, and remaining so when kept till spring.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.

LARGE RIBBED SWISS CHARD, SILVER OR SEA KALE BEET. We recommend all our customers to try this distinct vegetable, which is superior to the common beet for greens; if sown at the same time it will be fit for use before it. Later the plants form broad, flat, beautiful wax-like stems, which are delicious as beets or pickled.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.

SUGAR BEETS

Sugar Beets are desirable not only for the manufacture of sugar, but are invaluable for stock-feeding and table use. They are deservedly popular, both on the farm and in the small garden. No one who raises beets of any kind should fail to plant at least a trial bed. Our list comprises the best strains on the market.

SOIL.—The best soil for Sugar Beets is a rich, friable sandy or clayey loam. They cannot be profitably grown on a tenacious wet clay or a very sandy or excessively hard and stony soil. Rich, mucky soils will often give an immense yield of roots which, though excellent for feeding, are of little value for sugar-making. Most farm lands capable of producing a good crop of corn or wheat can be made to grow a good crop of beets.



EARLY ECLIPSE
BLOOD TURNIPS.

Vegetables Grown from "PURITY SEEDS" are Prize Winners

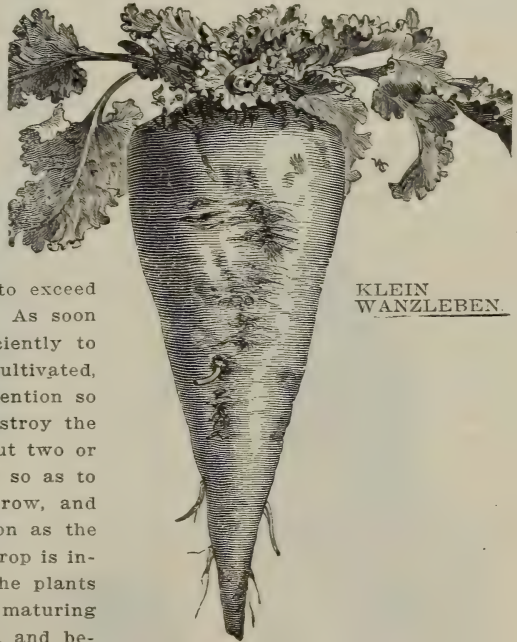
SUGAR BEETS—Continued

MANURE.—Sugar Beets do much better when the soil has been made rich for a preceding crop than when the fertilizers are applied the same season. The use of rank, undecomposed manures, or such as contain a large amount of nitrogen, will result in large, coarse roots, of little value for sugar-making. If the condition of the ground necessitates the use of a fertilizer the current season, the greatest care should be taken to have it evenly and thoroughly mixed with the surface soil.

SEED.—There is no crop where the quality of seed used is of greater importance than this; inferior seed cannot by any amount of skill in cultivation be made to give satisfactory yield. A great deal of most patient and skillful labor has been expended in establishing and developing strains of beets which are adapted to sugar-making. It is only by the use of the best seeds that profitable sugar-making is possible.

PLANTING AND CULTIVATING.—

The great secret of successful and economical culture of beets is through preparation of the soil before planting. The seed should be planted as soon as the soil can be gotten into good condition, which is not likely to be before the middle of April, but the seeds should be in before the last of May. We plant in drills twenty or thirty inches apart, dropping from twelve to twenty seeds to the foot. This will require from ten to fifteen pounds of seed to the acre. It is very important that the seed be well covered with not to exceed one inch of soil pressed firmly over it. As soon as the young plants have started sufficiently to make the rows visible they should be cultivated, and the field should receive constant attention so as to keep the surface soil loose and destroy the starting weeds. When the beets are about two or three inches high they should be thinned so as to stand six to eight inches apart in the row, and cultivation should be discontinued as soon as the roots have commenced to form. Often a crop is injured by late cultivation, which starts the plants into fresh growth when they should be maturing and developing sugar. Sugar beets ripen and become fit for harvesting as distinctly as do potatoes or corn, and they indicate that they are approaching this condition by the outer leaves turning yellowish and the top seeming to decrease in size owing to the curling of the central leaves. They should be gathered and stored when ripe or mature, for if left they may start into fresh growth, which lessens the proportion of sugar. The successful cultivation of beets rich in sugar requires rotation of crops, however rich and good the soil may appear to be.



KLEIN
WANZLEBEN

SUGAR BEETS—Continued

Klein Wanzleben ¶

A little larger than Vilmorin's Improved, and containing about the same amount of sugar. Its yield of beets is from twelve to eighteen tons per acre. The beet grows below the surface. The green leaves are rather large and spreading, with wavy edges. A little harder and easier grown than Vilmorin's Improved. Probably the best sort for the experimenter to use.

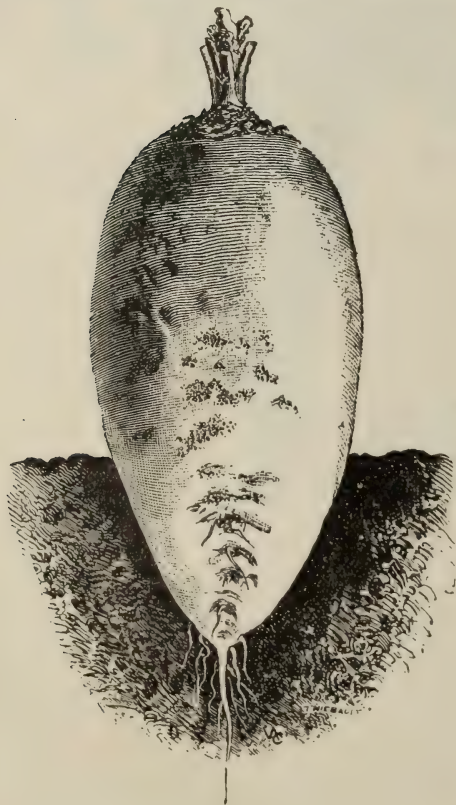
Oz. 5c; $\frac{1}{4}$ lb. 10c; lb. 35c.

Vilmorin's Improved

In general, the most desirable beet for the sugar factory is the one containing the largest percentage of sugar. In this variety we have one of the richest sorts in cultivation, and, moreover, it will do better on new lands than other variety, suffer less from an excess of nitrogen, and keep the best. In size it is medium or a little below, yielding from ten to sixteen tons per acre, and containing, under favorable conditions, as high as eighteen per cent sugar. The beet grows below the surface. The green leaves are smooth edged and spreading.

Oz. 5c; $\frac{1}{4}$ lb. 10c; lb. 35c.

Giant Feeding Sugar Beet, or Half Sugar Mangel



The investigations of scientific men and the experience of practical stock feeders have established that a ration of some appetizing green food is of such great importance as to be practically essential to the profitable winter feeding of stock. In the northern states a supply of such food can only be obtained from some root crops. Of these Mangel Wurzel is popular because of the immense yield, but it is not fully satisfactory because of the low nutritive value. By the same system of careful selection and breeding, which has accomplished so much with the Sugar Beet, there has been established in the **Giant Feeding Sugar** a strain of beets which, while giving nearly as large a yield of easily grown and harvested roots as a crop of Mangels, supplies a food of very much **higher nutritive value**, the roots for feeding purposes being really more valuable, pound for pound, than those of the very best strains of Sugar Beet, and the yield under equally favorable conditions being more than double. The roots grow partly out of the ground, and because of this and their shape, the crop can be harvested and stored at less expense than any other root crop. We are certain that everyone who plants this variety and grows it with care will be much pleased with the crop. Every farmer should try it.

Oz. 5c; $\frac{1}{4}$ lb. 10c; lb. 35c.

MANGEL WURZEL BEET

IMPROVED MAMMOTH LONG RED.—An improvement on the old variety. The roots are very large, uniformly straight and well formed, proportionately thicker, and are deeper colored than the common sort, and with smaller tops. We know our stock of this variety will produce the largest and finest roots which can be grown, and that it is vastly superior to many strains of the same sort offered under other names, such as Norbitan Giant, Colossal Monarch, etc.

Oz. 5c; ¼ lb. 10c; lb. 35c.

ORANGE GLOBE.—We think this one of the best varieties of Mangel Wurzel grown for stock feeding. It has exceedingly small tops and few leaves; leaf stalks and blades green; roots medium sized, uniformly globe-shaped, having a very small tap and few side roots; color of skin, deep orange yellow; flesh, white and of excellent quality. The roots grow almost entirely above ground, making them admirably adapted to shallow ground and very easy to harvest.

Oz. 5c; ¼ lb. 10c; lb. 35c.

GOLDEN TANKARD.—Tops comparatively small, with yellow stems and mid-ribs; neck very small; roots large, ovoid, but filled out at top and bottom, so as to approach a cylindrical form. Flesh yellow, zoned with white. A great improvement and worthy of use on every farm.

Oz. 5c; ¼ lb. 10c; lb. 35c.

BROCOLI

Although originating from a very distinct type, the modern improved sorts of Brocoli can scarcely be distinguished from cauliflower, the points of difference being that they are generally taller and the heads more divided. The culture is the same as that given for cauliflower.



LONG ISLAND IMPROVED.



IMPROVED.

EARLY LARGE WHITE FRENCH. The best variety. Heads white, very compact and hard, continuing firm for a long time. A hardy, vigorous, easy-growing sort.

Pkt. 5c; oz. 35c; ¼ lb. \$1.00; lb. \$3.50.

BRUSSELS SPROUTS

Long Island Improved.

The plants, which are very hardy, grow two or three feet high, and produce from the sides of the stalk numerous little sprouts which resemble very small cabbages, one or two inches in diameter. The leaves should be broken down in the fall, to give the little heads more room to grow. They should be treated in all respects like winter cabbage or kale. We offer a carefully grown strain, very hardy, and giving compact round sprouts of large size and good quality.

Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50.

CABBAGES

For many years Cabbage Seed has been a leading specialty with us. Our Cabbage Seeds are all grown from approved stock seeds. There is none more reliable, none that can be more implicitly depended upon to give planters uniformly satisfactory results.

CULTURE.—The requisites for complete success are: **First**, good seed; this plant is largely dependent upon the best seed for its success; no satisfactory results can possibly be obtained from poor stock. **Second**, rich, well-prepared ground. **Third**, frequent and thorough cultivation. A heavy, moist and rich loam is most suitable. It should be highly manured and worked deep. Cabbage is universally grown all over the country, and specific directions regarding the time and methods of planting applicable to all localities cannot be given. In general, north of the 40th parallel, the early sorts should be sown very early in hot-beds, hardened off by gradually exposing them to night air, and transplanted as early as the ground is in good condition, setting eighteen to thirty-six inches apart, according to size of variety. South of the 40th parallel, sow about the middle of September, or later, according to latitude, transplanting into cold frames if necessary to keep through the winter, and setting in open ground as early as possible in the spring.

The late autumn and winter varieties may be sown from the middle to the last of spring, and transplanted when four to six inches high. Shade and water the late sowings in dry weather to get them up. It is important that the plants should not be crowded in the seed bed, or they will run up weak and slender, and be likely to make long stems.

One of the most successful Eastern market gardeners recommends sowing cabbage for family use as follows: At the desired time, sow the seed in hills, six to twelve seeds in a place, and after the plants are of sufficient size, thin to a single plant to the hill, and cultivate as usual. This is a very simple method, and in some cases is very successful.

Cabbage should be hoed every week, and the ground stirred as they advance in growth, drawing up a little earth to the plants each time until they begin to head, when they should be thoroughly cultivated and left to mature. Loosening the roots will sometimes retard the bursting of full grown heads.

Of late years many crops of early cabbage have been destroyed by maggots at the roots. The best remedy seems to be to remove the earth from around the stem and apply an emulsion of kerosene (coal oil) made as follows: Add one quart of kerosene oil to two quarts of **boiling** soft soap, which has been thinned to the consistency of cream. Stir the oil thoroughly by churning or other method until it has united with the soap and formed a creamy-like substance. Then dilute with five times as much water.

Tobacco dust, ashes, slacked lime and coal dust are all recommended as preventives, and with us have proved valuable in the order named. These are scattered about the plants, leaving one here and there untreated for the flies to congregate around and deposit their eggs upon, when the plants should be pulled up and destroyed.

The cabbage worms which destroy the leaves, and heads later, may be killed by dusting with pyrethrum powder.

If the disease called "club root" should get a foothold, do not plant the land with any of the cabbage family for a year or two. This is usually an effective remedy.

To preserve cabbage during the winter, pull them on a dry day, and turn them over on the heads a few hours to drain. Set them out in cool cellar, or bury them in long trenches in a dry situation, covering with boards or straw so as to keep out frost and rain.

A great many of the varieties of cabbage are simply strains rather than **distinct** sorts, and are **really** the same as some older and better known kinds. We think there is not a single variety offered in this country which we have not seen both in trial and in fields, and we are confident that every good quality can be found in a greater degree in the varieties we offer than any other kinds.

First Early Cabbages

Early Jersey Wakefield ☞

The earliest and hardest heading of extra early Spring Cabbages. Most gardeners depend upon it for the bulk of their extra early crop. Our stock is grown and selected with the greatest care, and there is none better, and there are few as good. Heads conical, very compact, solid and of excellent quality. The thick, stout leaves and compact habit make it the best for wintering over and very early setting.

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.



CABBAGES—First Early, Continued

New Early Spring

This fine new cabbage represents an early type of great value. It has all the merits of Early Summer, but matures in advance of that well-known variety. In fact, it is ready to cut as soon as Jersey Wakefield. It is a flat cabbage. Single heads of Early Spring often attain a weight of five pounds, but on the average they are about four-fifths the size of Early Summer, and have very few outside leaves. The introducer says the plants may be set as closely as twenty-one inches, or 13,500 to the acre. The growth is very uniform, the head being round and slightly flattened. The stem is short, and extends but a little way into the head. The whole plant is finely bred in every way, the head being nearly all edible. The leaves present no coarse features. The head is formed while the plant is still comparatively young—long before reaching maturity—and the head grows in size and hardness as the plant attains strength. The flavor is very good, and Early Spring Cabbage is equally adapted to private gardens and to market. It will outweigh Jersey Wakefield fully a fifth, head for head, which is a very important matter in commercial gardening, and would be significant where Cabbage is grown by the acre. We consider Early Spring a highly valuable addition to our list.



NEW EARLY SPRING.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.



EXTRA EARLY EUREKA.

Extra Early Eureka

MAULE'S EXTRA EARLY.

The Earliest Cabbage in Existence. A Flat-headed rival of the famous Wakefield. Earlier, Hardier, Heavier, and Better Than That Renowned Sort.

Extra Early Eureka originated with a pioneer cabbage grower of Long Island, and with him has proven decidedly earlier than Express Etampes, Wakefield, Early Spring, Early Parisian, etc.

For more than a quarter century the Early Jersey Wakefield has held the undisputed position of leader among the early cabbages. Now the Early Jersey Wakefield has a

flat-headed rival; a cabbage better in points of weight and hardness, and equally good in all other respects—and a day or two earlier. It will, beyond a doubt, supercede all others of its class as soon as its superlative excellence becomes generally known. It can be planted as close as Wakefield and is a sure header. It excels Wakefield and all other early cabbages in solidity of head; in fact, the head is as hard as a stone. It is a choice market sort on account of both shape and quality. It is a beautiful cabbage in appearance. No wonder the buyers of early cabbage select these attractive heads when displayed on the market stalls. Almost everybody would pick out one of these solid flat-heads in preference to a pointed cabbage.

Those among our customers who desire to make early cabbage pay, and pay well, must plant largely of Extra Early Eureka. It is a thoroughly first class early business cabbage and quite as good for home consumption.

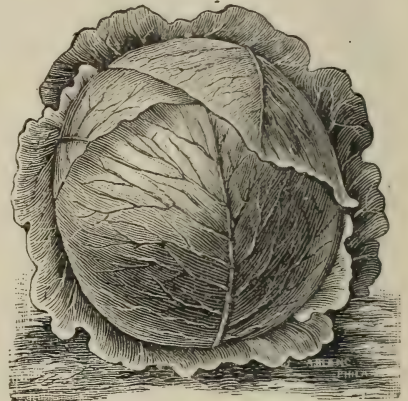
Pkt. 5c; oz. 30c; ¼ lb. \$1.00; lb. \$3.00.

SECOND EARLY OR SUMMER CABBAGES

All Head Early

A comparatively new flat head cabbage of distinct characteristics, now widely planted. It has proved itself to be adaptable to a wide range of both soil and climate, and is now worthy of recognition as a standard American sort. Nothing better of its kind is within the reach of cultivators. It is a money-maker for gardeners. It is the earliest of large cabbages, being at least a week in advance of any of the strains of Early Summer. In size it is one-third larger than Early Summer. The deep, flat heads are remarkably uniform in shape, size and color. The introducer called it a "thoroughbred," and we believe it is fully deserving of the name. Good quality and tenderness are marked features. Tenderness in a cabbage is mainly the result of rapid growth, and as this is quicker in heading than any other flat cabbage, it is consequently more tender and delicate. The veins and mid-ribs are finer than in other flat-head kinds. It is suitable for growth in spring and early summer, or for use as a winter sort. Seed sown in July, and the plants set in August, will produce good heads for wintering. The compact habit of growth of All Head Cabbage renders close planting feasible. The introducer named three feet by one and a half feet as proper planting distances. This allows for over 9,500 plants per acre, of which 95 per cent. should produce heads.

Pkt. 5c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.



ALL-HEAD EARLY.



EARLY WINNIGSTADT.

Early Winnigstadt

One of the best for general use, being very hardy and sure to head, forming a hard head when most sorts fail.

Those who have failed with other kinds can hope to succeed with this.

It seems to suffer less from the cabbage worm than any other sort.

Plant is very compact, with short, thick leaves.

Heads regular, conical, very hard, and keep well both summer and winter.

It is the hardiest, not only as regards frost, but will suffer less from excessive wet, drought, insects or disease than any other second early sort, and will give a fair crop of heads when others fail.

Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; lb. \$1.50.

CABBAGES—Second Early or Summer, Continued**Early Summer** ¶

This variety matures ten days or two weeks after Wakefield, with heads almost double the size of that very early sort. It is one of the best of the large early cabbages, of round, flattened form and very compact and solid. It is a valuable variety for the market gardener. One point in favor of this cabbage is that on account of its short outer leaves it can be planted almost as closely as the Wakefield, or from 11,000 to 12,000 plants to the acre. The shape of this cabbage is remarkably uniform. We offer strictly first-class Long Island grown seed.

Pkt. 5c; oz. 20c; ¼ lb. 50c; lb. \$1.75.

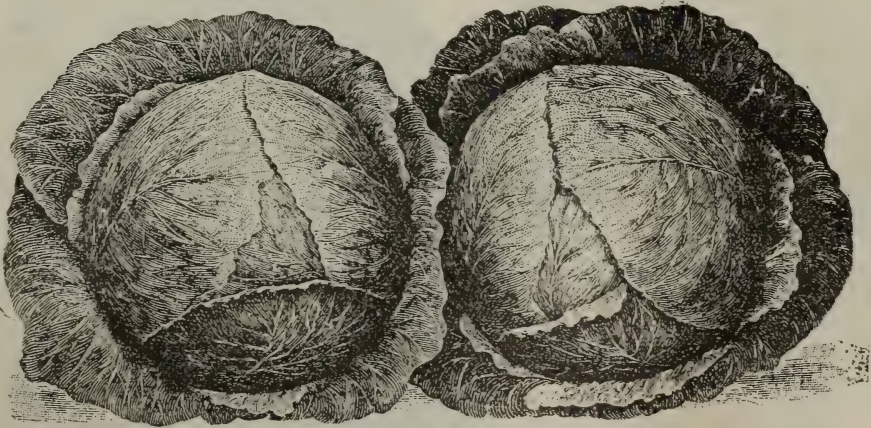


EARLY SUMMER.

Early Dwarf Flat Dutch

An old variety, but of unabated popularity with a large number of our customers. The type is so pronounced and the name so widely known that it would be hard to displace it, with even a better sort. It continues to succeed everywhere. It is an excellent second early cabbage, producing large, solid heads of uniform shape, flattened on top, and always making a handsome appearance. It is well adapted to a wide range of climatic conditions, but seems particularly suited to the South, as it has strong heat-resisting qualities.

Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50.



EARLY DWARF FLAT DUTCH.

If You Want Good Crops Plant "PURITY SEEDS"

CABBAGES—Second Early or Summer, Continued

Danish Summer Ball Head Cabbage

An Early Strain of a Famous Late Sort.



Everybody acquainted with Danish Ball Head Cabbage, which is medium to late, will be interested in this new summer sort. Hundreds of our patrons consider Danish Ball Head the cabbage to grow for market, and will be delighted with an early, quick-maturing strain of that favorite variety. Danish Summer Ball Head is equally as hard as the original type, and its keeping qualities are not surpassed by any warm weather cabbage. It is to be regarded as a second-early sort, coming to maturity long in advance of the parent type. It closely resembles the original Danish Ball Head in all respects, except that it is a little smaller and matures more quickly. Its earliness will make it available for commercial purposes all summer, and we believe it will prove to be extremely profitable. If

it has the same experience as the original Danish Ball Head Cabbage it will make its way irresistibly into almost every garden and hold a place from which nothing can dislodge it. The Danish Ball Head is a cabbage of peculiar type, with such marked individual traits that nothing else resembles it. It belongs in a class by itself, and hence this new summer heading strain must be actually tried in order to be understood and fully appreciated.

Pkt. 5c; oz. 30c; $\frac{1}{4}$ lb. \$1.00; lb. \$3.00.

Succession

The Succession Cabbage follows ten days behind the Early Summer, and differs from that variety in forming heads at least one-third heavier, while at the same time it can be planted nearly as close, as its outer leaves are usually short and compact for a cabbage forming such a large and heavy head. In about two acres of it which was growing for seed purposes, and examined by three experts, it was pronounced to be the most perfect type of cabbage they had ever seen—every cabbage was headed up, of a uniformly perfect shape, large and heavy. Although this variety will be largely grown to come in for midsummer use, it will also be most valuable as a fall or winter variety, as its firm, solid heads make it an excellent keeper.

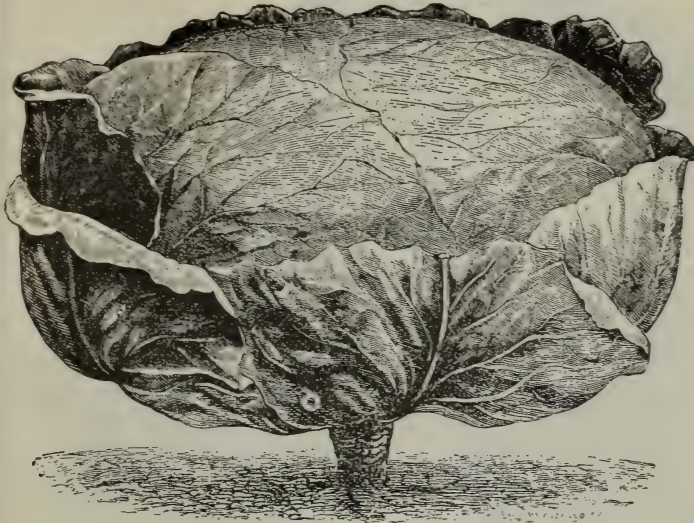
Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 60c; lb. \$2.



SUCCESSION.

LATE OR AUTUMN CABBAGES

Louisville Short-Stem Drumhead ☐



SHORT-STEM DRUMHEAD.

Sureness in heading and regularity in growth have put the Short-Stem Drumhead at the top of the list, and we have no fear of using words of praise too high for its merits. It forms very large, solid, flattened heads, uniform in shape and color, and of handsome appearance. It has a very short stem, and is a compact grower. Shortness of stem is so characteristic as to be associated with the very best strains of this cabbage, and the stock which we offer is thoroughbred in this and all other respects. It is as natural for this cabbage to form a head as to form leaves, and reports of 99 marketable heads from 100 plants are of frequent occurrence. Nobody will be disappointed in our strain of Short-Stem Drumhead, for it represents the best principles of seed culture applied to a standard vegetable. Our improved Drumhead far

surpasses the old-fashioned strains of the same name, being quicker and more certain to mature, and having heads of deeper and better shape. Short-Stem Drumhead Cabbage is a variety of the same general type as the Flat Dutch, and should have similar treatment in the field, requiring to be planted about two and a half feet apart in rows three to three and a half feet apart, necessitating the use of 5,000 to 6,000 plants to the acre. The head is rather broader and flatter than the Flat Dutch, but the inside texture is much the same, and the flavor is equally good. It is a standard sort for winter keeping, and is equally available with the Flat Dutch for all purposes. It sells readily in the winter and spring markets. Its cultural requirements are the same as the other late sorts, the seed being sown in the North in May or June, and the plants going into the field usually as a second crop. It reaches maturity at the same time as Flat Dutch, or from three to five days later.

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

The True Danish Ball Head ☐ Headquarters Seed

Of late years one of the most popular cabbages in our entire list. This variety is very hardy, very handsome, very solid; one of the best keepers and of fine quality. It is one of the best growing for distant markets or for late spring use.

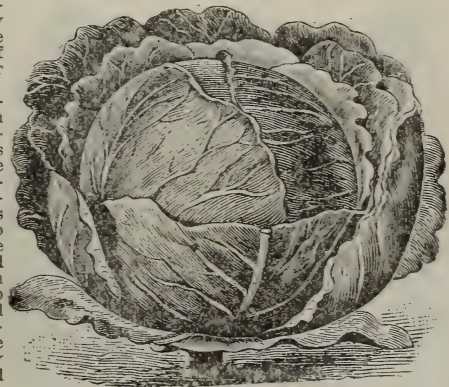
The plant is vigorous, rather compact growing, with a longer stem than most American sorts, and exceedingly hardy, not only in resisting cold, but also dry weather. It matures its head a little later than the Flat Dutch. The leaves are large, very thick, bluish-green, covered with whitish bloom and borne with an upward tendency. The head is round, of less diameter than that of the Flat Dutch, but so very solid that it weighs quite as much. The leaves of the head are very thick, white and tender, and not only overlap or pass by each other more than those of most sorts, but are so tightly drawn as to form an exceedingly solid head, which stands shipment better and arrives at its destination in more attractive shape than those of any other late sort. In quality it is one of the best, being very white, crisp and tender.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.

This price is for our Best Imported Danish-grown seed. We have a first-class stock, however, of American seed at \$2.00 per pound.

MAMMOTH ROCK RED. ☐ This is the best, largest and surest heading Red Cabbage ever introduced, and much better than the stock offered as "Red Drumhead." No one should plant the latter as long as our strain of Mammoth Rock Red can be obtained. The plant is large, with numerous spreading leaves. The head is large, round, very solid and of deep red color. Ninety-eight per cent of the plants will form extra fine heads

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.



THE TRUE DANISH BALL HEAD.



Surehead ☞

SUREHEAD. — This famous cabbage, named and introduced in 1877, has gained steadily in popular favor. Hardly any other variety can approach the Surehead in fine quality and uniform reliability in forming solid heads, of good size and superb quality. Surehead Cabbage produces large, round flattened heads of the Flat Dutch type, and is remarkable for its certainty to head. It is **all head**, and **sure to head**, even under unfavorable conditions. The heads are remarkably uniform, very hard, firm and fine in texture, and ordinarily weigh from ten to fifteen pounds each. It is very sweet flavored, has but few loose leaves, keeps well, is good for shipping, and is just the variety and quality to suit market gardeners, farmers and all lovers of good cabbage.

Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.

Superior Premium Late Flat Dutch

The largest and best of the late market sorts. A strain of Late Flat Dutch Cabbage in which the plants are very vigorous and hardy. The leaves are very large and broad; the stem of moderate height; the head large and very solid. A hardy and very sure heading sort. A thousand plants can be depended



SUPERIOR PREMIUM LATE FLAT DUTCH.

upon to produce from 950 to 1,000 large, oval, solid heads of splendid quality, which will keep in the best condition for a long time. Particularly desirable for those who wish to raise large quantities of cabbage for fall shipment. Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 45c; lb. \$1.50.

LATE OR AUTUMN CABBAGES

Savoy Cabbage

These are not as generally cultivated with us as in Europe, where the more delicate flavor of this type of cabbage is highly esteemed. The leaves are very much crumpled—that is, the tissue between the veins is larger than is sufficient to fill the space and bulged out and quite heavily wrinkled in accommodating itself to the limited space in which it has to grow. This tissue is the most delicate part of the cabbage, and the larger proportion of this delicate tissue renders the whole head of superior quality. They make the finest cabbages for summer and fall use in the home, or for near-by markets, being especially desirable for boiling and cold slaw.



IMPROVED PERFECTION DRUMHEAD SAVOY.

Improved Perfection
Drumhead Savoy

The finest variety for fall and winter use. The heads are quite large, very much crumpled, round, and very solid; the outer leaves being closely folded over the head, which balances the inner portion to a snowy whiteness. Plants strong and vigorous in growth, with the outer leaves of a dark, rich green. Being so extremely vigorous and healthy, it withstands the attacks of the cabbage worm better than the ordinary type, while also possessing much greater sweetness and more delicate flavor.

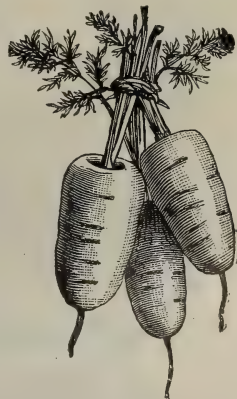
Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

CARROTS

THE CARROT is one of the most wholesome and nutritious of our garden roots, and deserves to be more extensively used, both for culinary and stock-feeding purposes. We urge our readers to give some of the early table sorts a trial. For feeding stock, especially horses and milch cows, the carrot cannot be surpassed, and it should be more largely grown by farmers for this purpose.

CULTURE.—While a sandy loam made rich by manuring the previous year is the best soil for the carrot, any good land, if thoroughly and deeply worked, will produce satisfactory crops. When it is possible to do so, it is advisable to sow as early in the spring as the ground is fit to work, though good crops may, in this latitude, be grown from sowings as late as June 15, but success from such a late planting is uncertain. For table use sow the smaller kinds as early as practicable in rows 16 to 18 inches apart. For field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart, using from one and one-half to three pounds to the acre, according to the distance between rows. Cover one-half to one inch deep and see to it that the soil is pressed firmly above the seed. As soon as the plants appear, use the cultivator or wheel hoe. Do not let the weeds get a start. Thin the smaller table sorts to 8 to 10 to the foot, and the field varieties to 3 to 6 inches apart in the row. For winter use gather and store like beets or turnips.

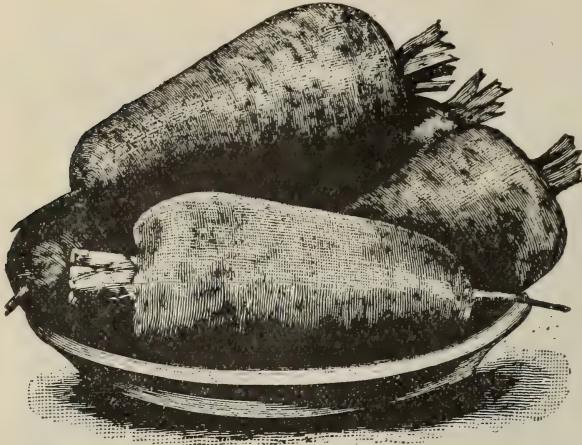
EARLY SCARLET HORN.—A variety of carrot long and favorably known to all growers. It is not large, but is often used for early crop. It is sometimes used for forcing. Considered by many people to be the best early table sort. The flesh is fine grained and the color a deep orange. It has small tops, and grows well in shallow soil. It matures eight to ten days sooner than Long Orange.



EARLY SCARLET
HORN.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

CARROTS—Continued



CHANTENAY, OR MODEL.

Chantenay, or Model ¶

This variety is a very productive one. It has an extra large shoulder, is easily dug, and is desirable in all respects. It is a stump rooted sort, very smooth, fine in texture and of a beautiful, rich orange color. For table use it is by many considered to be the best of all, both on account of shape and quality. The flesh, when cooked, is very tender.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

Guerrande, or Ox Heart

Tops small for the size of the roots, which are comparatively short, but often reach a diameter of seven inches, terminating abruptly in a small tap root. Flesh bright orange, fine grained and sweet. This is a desirable variety for soil so hard and stiff that longer growing sorts would not thrive on it. When young, excellent for table use, and when mature equally good for stock.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.



GUERRANDE, OR OX HEART CARROT.



IMPROVED LONG ORANGE.

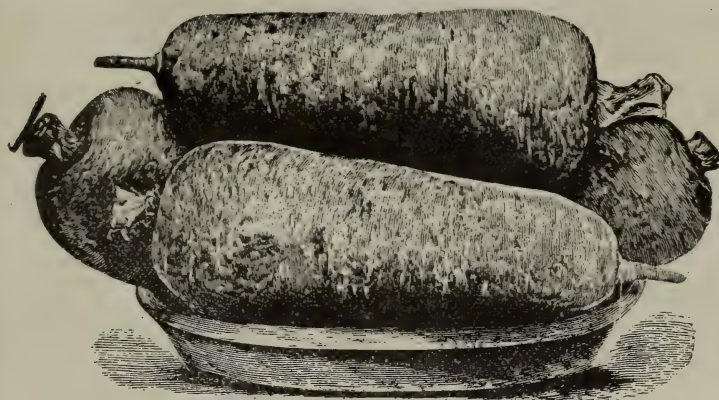
Improved Long Orange

The most popular of the older sorts for farm use on mellow soil. An improvement obtained by years of careful selection of the best formed and deepest colored roots of the old Long Orange. Roots comparatively shorter than the Long Orange, and smoother, but so uniform and true that the bulk of the crop will be greater.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 65c.

CARROTS—Continued

Danvers, Half Long ☞



DANVERS, HALF LONG.

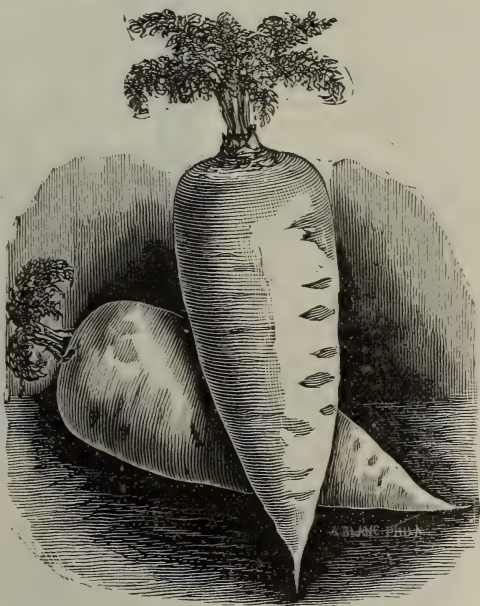
Grown largely on account of its great productiveness and adaptability to all classes of soil. Tops medium sized, coarsely divided. The smooth and handsome roots are deep orange, of medium length, tapering uniformly to a blunt point, flesh sweet, crisp, tender and of a deep orange color. Although the roots of this variety are short, they produce as large a bulk as the longer field sorts and are more easily harvested.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

Improved Short White ☞

We think this distinct variety is destined to take first rank as a field carrot, owing to its enormous productiveness and the ease with which it can be harvested. Roots half long, smooth, very heavy at the shoulder, but tapering regularly to the point; color light green at the crown, pure white below; flesh rich, white, solid, crisp and of excellent flavor. This variety is a real acquisition as a heavy yielding, easily harvested, white carrot, and is the best of this class; unexcelled for stock feeding.

Oz. 5c; ¼ lb. 20c; lb. 50c.



IMPROVED SHORT WHITE.

Note.—The practice of feeding carrots to both horses and cattle in winter is to be encouraged. The roots make an excellent addition to the usual ration. Horses especially appreciate carrots in winter. The seed may be sown as late as July 1. Summer-sown seed should be carefully and firmly put into the ground, half an inch under the surface. Field carrots should be sown in rows 24 to 30 inches apart, thinning to 6 or 7 inches in the row, using 2 lbs. of seed to the acre. The winter storage is the same as for turnips or beets; either in soil-covered heaps in the field or in root cellars.

When ordering seeds by the pound, to go by express or freight, purchaser to pay transportation charges, 10 cents per pound may be deducted from prices quoted in this catalogue.

CAULIFLOWER

The cauliflower, although one of the most delicious vegetables, is but little grown, except by professional gardeners, because of the erroneous notion that it is so difficult to grow—that only skilled gardeners can produce it. Anyone will be reasonably certain of success with this most desirable vegetable if he carefully follows the cultural directions given below.

CULTURE.—For spring and early summer crop sow in March or early in April, in hot-bed, and transplant to cold frame when sufficiently large, and to the open ground as soon as danger of hard freezing is over. The plants endure a light frost. The soil for cauliflower should be like that for cabbage, but it is better if made richer than is ordinarily used for that crop. Give the plants thorough culture and keep free from worms with Persian insect powder. For late crop sow at same time as for late cabbage and treat in the same manner. It should be borne in mind that cauliflower **will not** head up well in dry, hot weather, and hence the sowings should be so regulated as to bring it to maturity either before the hot summer weather sets in or not until the cooler weather of the fall. If it receive at this time a liberal supply of water, the size and quality of the heads will be greatly improved. After the heads begin to form, draw the leaves over and pin or tie them together to protect the head from the sun and keep it white. The heads should be cut for use while the "curd" is compact and hard, as they soon become tough and bitter after they open and separate into branches.

Our Cauliflower Seed is produced by the most experienced growers in Europe, in such localities as are best suited to its proper development, and the greatest care is taken to save seed from perfectly developed plants only.

Best Early Snowball ☞

Extensively grown for forcing or wintering over for early crop.

It is exceedingly early and hardy, and is one of the surest to make a solid, compact head.

The best for late summer and fall crop.

Good seed is absolutely necessary for success in growing cauliflower.

Our seed is most carefully grown.

With reasonable care every plant will produce a fine head.

Henderson's Strain:
Pkt. 25c; oz. \$4.00.

A fine strain, equal to that generally offered:

Pkt. 15c; oz. \$2.50.



BEST EARLY SNOWBALL.

Extra Early Dwarf Erfurt

This variety is as early as Early Snowball, and is very desirable for forcing or for planting outdoors. Plants compact with few narrow, upright leaves, and suited for close planting. Form solid, compact heads, even under unfavorable conditions, and is therefore one of the most desirable for general use. Our stock of this is unsurpassed, and we assure our customers that it is as early as any catalogued as "earliest" or "first early."

Finest strain: Pkt. 25c; oz. \$3.00.

When You Want Fine Vegetables Plant "PURITY SEEDS"

CELERY

CULTURE.—Sow the seed (which is slow to germinate) in shallow boxes, or in a finely prepared seed bed out of doors, in straight rows, so that the small plants may be kept free from weeds. See to it that the seed is not covered too deep and that the bed is kept moist, almost wet, until the seeds germinate, as plenty of moisture is essential to get a satisfactory growth. When about two inches high, thin out and transplant so that they may stand three inches apart, and when the plants are four inches high, cut off the tops, which will cause them to grow stocky. The crop is usually made to succeed some earlier one, but in order to grow good celery the soil must be made as rich as possible, the essentials to success being very rich soil and plenty of water. If good plants are used they may be set out as late as the middle of August, but the best results are usually obtained from setting about the middle of June or the first of July. The most desirable time will depend upon local climate, and is that which will bring the plants to maturity during cool, moist weather. In setting, prepare the broad, shallow trenches, about six inches deep and four feet apart, cutting off the outer leaves and **pressing the soil firmly about the roots.** When the plants are nearly full grown they should be "handled," which is done by one man gathering the leaves together while a second draws the earth about the plant to one-third its height, taking care that none of the earth falls between the leaves, as it would be likely to cause them to rust or rot. After a few days draw more earth about them, and repeat the process every few days until only the tops of the leaves are visible. Or it may be blanched by pressing the leaves together with two wide boards held in place by stakes. This is the method commonly used by market gardeners, but celery so blanched is more likely to become pithy than that blanched with earth. Care should be taken that the plants are not disturbed while they are wet or the ground is damp, as it would be sure to injure them. A part of the crop may be simply "handled," and then at the approach of severe freezing weather taken up and set out compactly in a dark cellar or an unused cold frame which can be kept just above the freezing point, and it will then gradually blanch so that it may be used throughout the winter. Should the plants begin to wilt, water the roots without wetting the stalks or leaves, and they will revive again.

Celery is sometimes grown by what is termed the "new process," which consists in making a spot as rich as possible, and there setting the plants six to eight inches apart each way. If the soil is very rich and there is an abundance of water, the plants will blanch each other and the product will be very white and handsome, but we think it is inferior in quality to that grown by the old method.

White Plume ☞

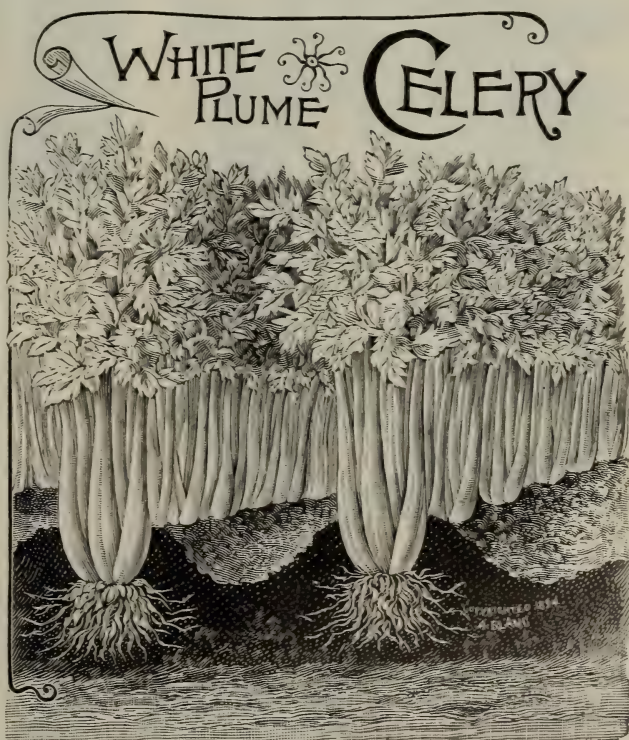
While we are fully aware that this variety has great merit as an early market sort, being as early as any and very attractive when fit for use, yet we do not think that it compares favorably with the Golden Self-Blanching, either in flavor or solidity, or that it will remain in condition for use as long after it is earthed up.

Plants light yellowish-green, with tips of leaves almost white.

As they mature, the inner stems and leaves turn white and require to be earthed up but a short time before they are in condition for use.

An **Improved White Plume** is being offered, but careful comparison with our stock fails to show that it is equal to that we offer.

Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.



WHITE PLUME.

CELERY—Continued**Rose Ribbed Paris Self-Blanching
or Golden Rose**

This sort resembles in general character the Golden Self-Blanching, from which it originated, but the plant is more compact, the stalks a little larger and most beautifully tinted with red at the base, while the upper portions, particularly of the heart stems, are a richer, deeper yellow. The plant is stout and vigorous and as self-blanching as any variety in cultivation. The leaves are broad, the outer ones dark green, but they become more yellow toward the center until those of the heart are rich yellow. The stalks are large, thick and though the ribs are prominent the stalks are practically stringless and wonderfully crisp, tender and good flavored. In color they are very rich and waxlike yellow tinted with pink at the base, which deepens into a carmine line along the ridges.

Pkt. 5c; oz. 25c; ¼ lb. 85c; 1b. \$3.00.



GOLDEN SELF-BLANCHING.

much that is sold, and the planter who uses it once never cares to risk using any other. We have secured such stock by taking especial pains to develop one not only free from green and other deteriorated plants, but in which the comparatively short, thick stalks shall have the crisp, tender texture and nut-like flavor which makes this the best early sort.

Pkt. 5c; oz. 30c; ¼ lb. \$1.00; 1b. \$3.50.



ROSE RIBBED PARIS.

**Golden
Self-Blanching**

The Standard of Excellence

As an Early Sort.

Critical gardeners depend upon our stock of this sort to produce their finest early celery.

It certainly is far superior in quality to

Note.—When you order seeds to go by express, you to pay the transportation charges, 10 cents may be deducted from the pound prices.

CELERY—Continued

Evans' Triumph

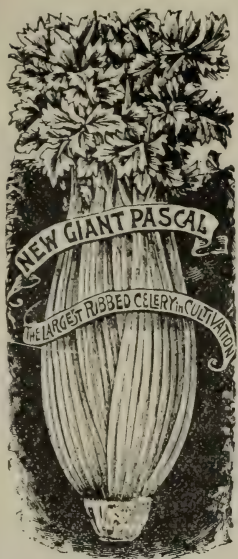
This is by Far the Best of the Late Varieties.

The very large, solid, crisp, tender stalks are not only very beautiful, but of superb quality. When it is possible to secure such pure and well-bred stocks of Golden Self-Blanching, Rose-Ribbed Paris and Evans' Triumph Celery as we offer, there is nothing further to be desired, and every private garden should have them. No wide awake gardener will be without them.

Pkt. 5c; oz. 20c; ¼ lb. 50c; lb. \$1.75.

GIANT PASCAL.—In one sense this has proved as great an addition to our list as the Golden Self-Blanching itself, of which it is an offspring. We refer to the very high quality of the Giant Pascal, which has made it celebrated wherever quality is a prime consideration. It partakes of the sweet, nutty flavor of the Golden Self-Blanching; and, though the stalks are very large in diameter, they have no bitter taste whatever. The height is about two feet. The stalks are thick, solid and stringless, and almost as brittle as glass—fewer in number than in ordinary kinds of celery, but making full weight by reason of width, thickness and succulence. We do not think the color of any celery is better described by the word "ivory" than this one. It blanches easily and keeps well.

Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50.



GIANT PASCAL.

CELERIAC

or Turnip-Rooted Celery.

CULTURE.—Sow the seed at the same season and give the same treatment as common celery. Transplant the young plants to moist, rich soil, in rows two feet apart and six inches apart in the row. Give thorough culture. As the roots are the edible portion of this vegetable, it is not necessary to earth up or "handle" it. After the roots have attained a diameter of two inches or over they will be fit for use. To keep through winter, pack in damp earth or sand and put in the cellar, or leave out of doors, covering with earth and straw, like beets or carrots.

LARGE SMOOTH PRAGUE, OR APPLE SHAPED.

An improved form of Turnip-Rooted Celery, producing large and smooth roots, which are almost round, and with very few side roots. Plants vigorous, with large, deep green foliage.

Pkt. 5c; oz. 15c; ¼ lb. 45c; lb. \$1.50.



LARGE SMOOTH PRAGUE.

CHERVIL

A hardy annual, worthy of more general use, for flavoring and garnishing. The curled variety is even more beautiful than parsley, and can be used to great advantage in beautifying dishes of meat and vegetables.

CULTURE.—Sow in early spring in rich, well prepared soil, and when plants are well established transplant to about one foot apart.

CURLED.—Greatly superior to the old, plain variety, being earlier, more handsome and having fully as fine fragrance and flavor.

Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

CHICORY

LARGE ROOTED, OR COFFEE.—Our stock is the improved type, with very much larger, smoother, whiter and proportionately shorter roots than the old kind. The dried and prepared roots are used quite extensively as a substitute or adulterant for coffee. Sow the seed as early in the spring as the ground can be prepared, in a rather light, moderately rich soil, in drills fifteen inches apart for garden, and two to two and one-half feet for field culture. When the plants are sufficiently large, thin to four to six inches apart in the row. Keep clear of weeds, and in the fall dig the roots, slice them and dry in an apple evaporator, or kiln constructed for the purpose. Where the roots are grown in quantity for the manufacture of the "prepared" chicory, they are usually brought to the factory in the "green" state and there dried in kilns constructed for that purpose.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 75c.

COLLARDS

A variety of cabbage known in different sections as "Cole," "Colewort," or simply "Greens." It is extensively used in the South, where it continues in luxuriant growth all winter.

GEORGIA, SOUTHERN, OR CREOLE.—We offer the true white or green stemmed sort so extensively used in the South, where it furnishes an abundance of food for man and beast. Forms a large, loose, open head, or a mass of leaves on a tall stem. Freezing does not injure but rather improves their quality. Sow thick in drills, in rich ground, transplanting when four inches high, or sow in drills where the plants are to remain, and thin to two or three feet apart in the row when of proper size. In the South sow from January to May and August to October.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

CORN SALAD

Fetticus or Lamb's Lettuce

This small salad is used during the winter and spring months as a substitute for lettuce and is also cooked and used like spinach. In warm weather the plants will mature in four to six weeks. Sow the seed in shallow drills about one foot apart, during August and September. If the soil is dry it should be firmly pressed over the seed in order to secure prompt germination. On the approach of severe cold weather, cover with straw or coarse litter. The plants will also do well if the seed is sown very early in the spring, and like most salad plants, are greatly improved if sown on **very rich soil**; indeed, the ground can scarcely be made too rich for them.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.



CORN SALAD.

CORN

SWEET OR SUGAR

CULTURE.—A rich, warm, alluvial soil is best, but excellent sweet corn can be raised on any good ordinary soil if it is deeply and thoroughly worked before planting. Give frequent and thorough, but **shallow**, cultivation, until the tassels appear.

Mammoth White Cory

The Largest and Best Extra Early Sweet Corn.

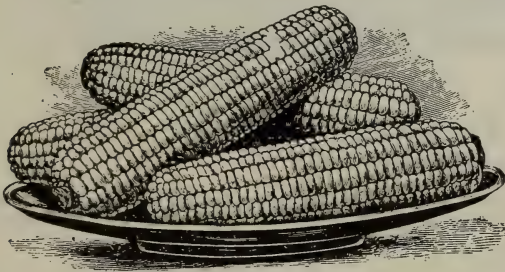
The stalks are no larger than those of the White Cob Corn, but each stalk furnishes two or more large, fine-shaped ears, which are fit for use before those of any other sort. The ears are twelve-rowed, very symmetrical and handsome, with no opening between the rows at the base. The grain is large, broad, very white and of remarkably good quality for such an early sort. The beauty and quality of this variety give it ready sale even when the market is overstocked.

Pkt. 10c; pt. 20c; qt. 35c; pk. \$1.10; bu. \$4.00.

Early Minnesota

This old and deservedly popular variety is one of the best early sorts for the market garden. Stalks four to five feet high, with no suckers, and bearing one or two ears well covered with husks; ears long, eight-rowed, kernels very broad, sweet and tender, not shrinking much in drying. By careful selection we have developed a stock of this standard variety which is remarkably uniform, and in which all the good qualities that have made this variety so popular are intensified.

Pkt. 10c; pt. 20c; qt. 35c; pk. \$1.10; bu. \$4.00.



CROSBY'S EARLY.

Crosby's Early

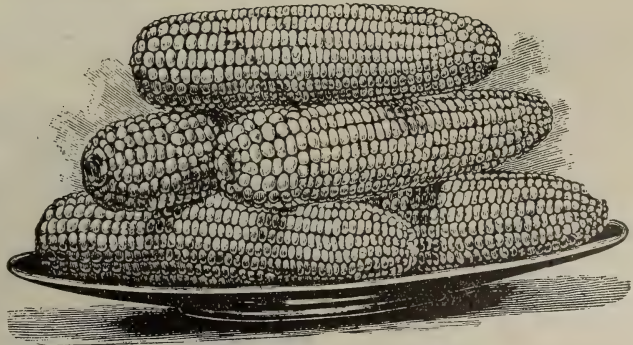
A most excellent variety, remarkably early and of the best flavor. Ears of medium size, twelve-rowed or more, with short, nearly square grains, which are very tender and sweet. This is the sort so largely grown in Maine for canning, and it is rather the use of this variety than any peculiarity of soil that has given Maine sweet corn its reputation for quality.

Pkt. 10c; pt. 20c; qt. 35c; pk. \$1.10; bu. \$4.00.

Early Mammoth Sugar

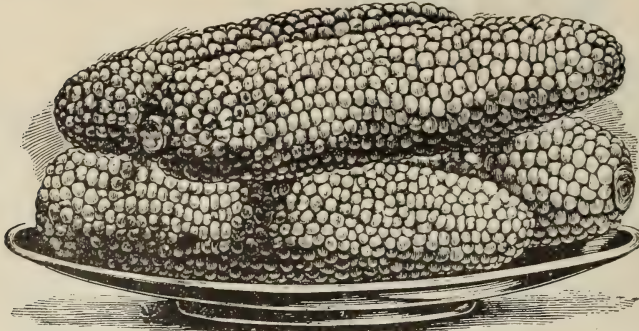
This tall-growing sweet corn has not only the largest ears, but is also one of the very sweetest known. It is particularly good for canning purposes, and is an excellent sort for the garden.

Pkt. 10c; pt. 20c; qt. 35c; pk. \$1.10; bu. \$4.00.



EARLY MAMMOTH SUGAR.

When corn by the pint or quart is ordered by express or freight, 5 cents per pint or 10 cents per quart may be deducted from the prices quoted. Pecks and bushels are sent by freight or express at purchaser's expense.

CORN—Sweet or Sugar, Continued

COUNTRY GENTLEMAN, OR IMPROVED SHOE PEG.

**Country Gentleman
or Improved
Shoe Peg**

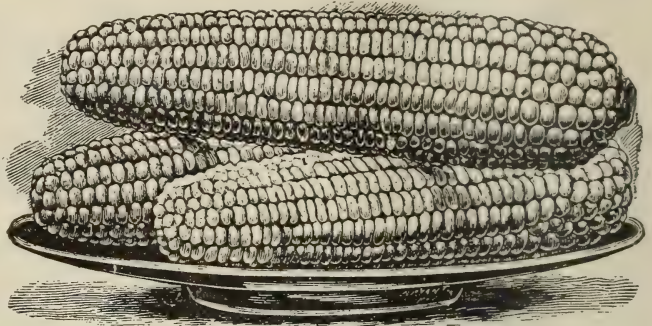
This is a midseason corn. Ears of quite large size, and frequently three on a stalk. Grains irregularly set on cob. Cob remarkably small, giving great depth to the kernel. For delicious flavor and sweetness we do not know of anything that can surpass this variety. We recommend it especially to private gardeners, or for choice retail trade.

**Pkt. 10c; pt. 20c; qt. 35c;
pk. \$1.25; bu. \$4.50.**

Stowell's Evergreen

Every market gardener and every private gardener in the land knows this grand old sweet corn. It is in high esteem for main crop or late use, being in especial favor with truckers and canners. The ears are of extra large size, and are tender and toothsome, with deep grain, and remaining a long time in edible condition. Stowell's Evergreen is one of the most productive, profitable and popular sweet corns on the market, and will long be included among leading standard sorts.

**Pkt. 10c; pt. 20c; qt. 35c;
pk. \$1.25; bu. \$4.50.**



STOWELL'S EVERGREEN.

**FIELD CORN
Minnesota White Flint**

This is a very early 8-10 rowed White Flint Corn, remarkable for its long ears, which are 14 to 16 inches long, with small cobs. It is an extra heavy yielder; each stalk will bear two and three good-sized ears. The ear is a perfect shape, with straight and even rows, which are filled from tip to tip.

Qt. 25c; pk. 60c; bu. \$2.00.

King of the Earlies

The originator says: "This is the earliest and finest Dent Corn—bright orange color, short, leafy stalks, medium sized ears, small red cobs, deep grains. Adapted for planting in high altitudes, and will mature a crop farther North than any other known variety; will shell easier and can be husked earlier than any other sort."

Qt. 25c; pk. 60c; bu. \$2.00.

**POP CORN
Monarch Prolific Eight Rowed**

The most prolific popcorn in cultivation. Its reported yields would seem fabulous if not attested by reliable growers. The ears are often 8 to 10 inches long, well filled with bright, handsome white grains. The stalk is of vigorous growth, reaching a height of six feet. This corn for popping is altogether unsurpassed, being perfect in this respect. The popped grains are of a delicious flavor.

Pt. 15c; qt. 30c; pk. \$1.25.

Mammoth White Rice

Everybody knows the old variety named White Rice. Our strain is an improvement, with larger ears, and the ears more abundantly produced. Six ears on a stalk is not a rare performance for this prolific and profitable popcorn. The grains are sharply pointed, and the ear is a handsome one. Most excellent for popping.

Pt. 15c; qt. 30c; pk. \$1.00.

CRESS

Curled or Pepper Grass

This small salad is much used with lettuce, to the flavor of which its warm, pungent taste makes a most agreeable addition. The seed should be sown in drills about sixteen inches apart on very rich ground, and the plants well cultivated. It may be planted very early, but repeated sowings are necessary to secure a succession. Keep off insects by dusting with Pyrethrum Powder.



Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.

CUCUMBER

This is one of the vegetables that can be grown to perfection by anyone who can control a few square yards of soil that is fully exposed to the sun. The fruit is so much better when gathered fresh from the vines than it is when obtained in the market that every family should be supplied from its own garden.

CULTURE.—In order to obtain the largest yield of cucumbers the soil should be well enriched with well-rotted manure, but an abundance of good fruit can be raised on any rich garden soil. Plant the seed in rows six feet apart and four to six feet apart in the row, dropping fifteen to twenty seeds in a hill. After the plants begin to crowd and the striped beetles are pretty well gone, thin to three plants to the hill. Give frequent but shallow cultivation, until the plants make runners so long that this is impracticable. In field culture, plow furrows four feet apart and similar ones at right angles to the first. At each intersection drop a shovelful or more of well-rotted manure, which should be well mixed with soil, forming a broad, flat hill, four to six inches above the surface. Many growers omit every fourth row, thus forming paths for the distribution of manure and gathering the fruit. In many sections where earliness is very important, market gardeners start plants in boxes made like the ordinary berry box, but without the raised bottom. The boxes are set in hot-beds or cold frames filled with rich, friable soil, and the seed planted. When danger of frost is over, the plants are set in the open ground, the boxes being cut away so the roots are not disturbed at all.

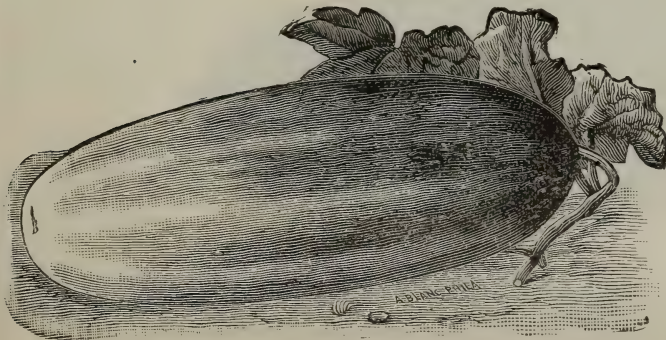
The plants are liable to attack from the striped cucumber beetles, which are so numerous in some cases as to destroy them. These may be kept off by frequent dusting with air-slacked lime, soot or sifted ashes diluted with fine road earth. Care should be taken not to use too much of any of the above materials, for if used too freely they will kill the vines. The best protection against injury is a vigorous and rapid growth of the young plants.

Pick all the fruit before it begins to ripen, as the vines will cease setting fruit as soon as any seed begins to mature. In gathering for pickles, cut the stems, instead of pulling the fruit off, and be careful not to mar the fruit in any way, for if the skin be broken the pickles will not keep so well.

EARLY SHORT GREEN, OR EARLY FRAME.—An excellent sort both for table use and for pickling. Plants very vigorous and productive. Fruit straight, handsome, small at each end, bright green, lighter at the blossom end, with crisp, tender flesh, and makes excellent pickles. Our stock is very superior.

Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

Improved Early White Spine



This cucumber cannot be praised too highly. It is nothing more nor less than an extra fine type of what is unquestionably the best and most widely grown variety in America. It is unsurpassed as a table and market sort, and is also used for pickling. No other kind exceeds it in productiveness, and it is equally good for forcing under glass or growth in the open air. The fruit is from 5 to 7 inches long and 2 to 3 inches in diameter. Color a beautiful light green.

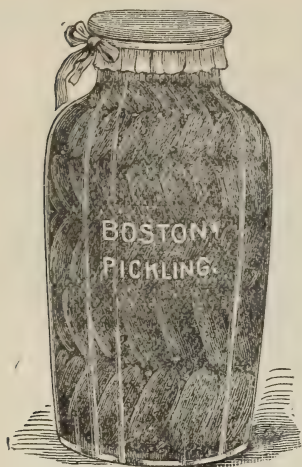
Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

CUCUMBERS—Continued

Boston Pickling or Green Prolific

This is one of the most popular pickling cucumbers. It is of the very best form and quality, and has yielded at the rate of over 200,000 pickles per acre. The fruit is uniform in shape and appearance, and its enormous productive ability makes the variety a favorite one with pickle growers and commercial gardeners.

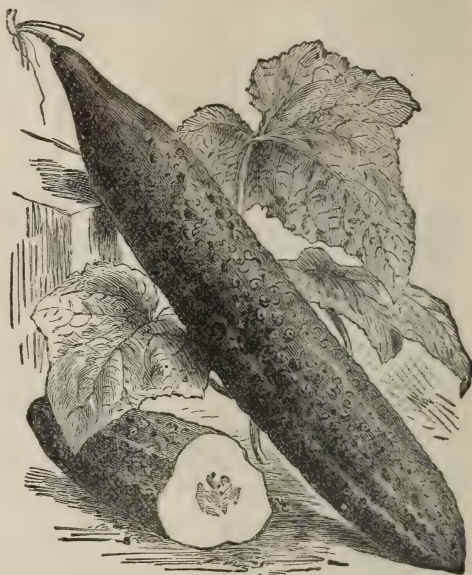
Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.



London Long Green

This fine cucumber grows from 12 to 16 inches or more in length, and is of superior quality. The young fruit is very largely used for pickling, and it is a standard sort for that purpose. Full sized cucumbers are in high favor for making the so-called sweet pickles. Vines are strong growers, and the fruit is always produced in great abundance, making it one of the most productive varieties in cultivation. We have an improved and very excellent strain, which has for many years been decidedly popular with our customers.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.



Gherkin for Pickling A very small, oval, prickly variety, quite distinct from all others. It is grown exclusively for pickles; is the smallest of all varieties, and should always be picked when young and tender. The seed is slow to germinate, requiring usually from two to three weeks.

Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 40c; lb. \$1.25.

New Klondike Cucumber

The Finest Flavored of All. Most Beautiful and Best Long Green Cucumber.

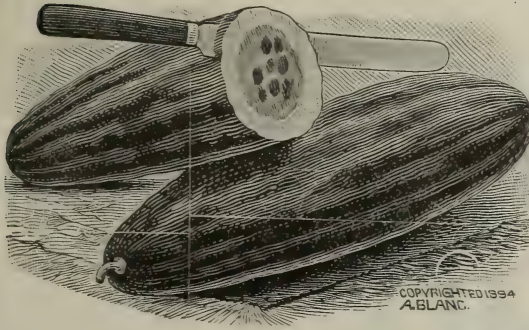


Vines produce an enormous crop, begin of unusually vigorous growth, with large, thick heavy leaves which withstand the attacks of insects. Perfectly smooth and green, the handsome fruits measure eight to ten inches long. They are always straight—never turn yellow, and are very solid. The flesh is a greenish white, firm, crisp and of most delicious flavor. The flesh is unusually thick and seed space extremely small. Klondike is absolutely unequalled. Gardeners everywhere will want this most handsome of all table cucumbers, both because they will bring an extra price on market, are of the white spine type, long retaining their dark green color—and because the vigorous vines are so wonderfully prolific.

Per Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

CUCUMBERS—Continued

The Best Pickling Cucumber



New Cumberland

This cucumber is a hybrid of the Peerless White Spine and Parisian Pickling. In it are combined the strong growth and great productiveness of one parent, with the crispness, solidity and attractive appearance of the other. It is of the White Spine type; a hardy, strong and vigorous grower, and very prolific. The pickles differ from other hardy sorts in being thickly set with fine spines over the entire surface except the extreme stem end, and during the whole period of growth, from the time they first set until fully grown, the form is exceptionally straight and symmetrical, thus being as choice a slicing variety as it is for pickles. The flesh is firm, but very crisp and tender at all stages.

Pkt. 10c; oz. 15c; ¼ lb. 50c; lb. \$1.50.

EGG PLANT

CULTURE.—Egg Plant seed germinates slowly, and should be started in strong heat, for in this, as in all subtropical plants, it is of importance to secure a rapid and continuous growth from the first, the plants never recovering from a check received when young. When the plants have formed two rough leaves, transplant to three or four inches apart. When the ground is warm, and all danger, not only from frost, but from cold nights, is past, harden off the plants by gradual exposure to the sun and air, and decrease the supply of water, then **carefully** transplant into the open ground, setting the plants two and a half feet apart. If needed shade the young plants and protect them from the potato bug which will often destroy them. Some seasons Egg Plants will fail to set fruit, or will not begin bearing until too late to mature, no matter how faithfully they may have been cared for. This is especially likely to happen if the summer is cool and rather moist. We know of no certain remedy for it, though pinching off the ends of the branches after the plants begin to bloom, and not letting more than two or three fruits set, is a good practice.



IMPROVED LARGE PURPLE.

Improved Large Purple Spineless

This variety has about superseded all others, both for market and private use. The large size and high quality of its fruit and its extreme productiveness make it the most profitable for market gardeners. Plants large and spreading; foliage light green; fruit very large, oval; color dark purple. Plants usually ripen four to eight large fruits. Bear in mind that our stock is **spineless**, which is a great advantage in handling.

Pkt. 5c; oz. 35c; ¼ lb. \$1.00; lb. \$3.50.

Early Long Purple

This is one of the earliest and most productive varieties. Fruit long, dark, rich purple, and of fine quality.

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

ENDIVE



GREEN CURLED.

Endive may be grown at any season of the year, but is more generally used late in the fall. Sow the seed in June or July, in drills fourteen inches apart, and when well started thin the plants to one foot apart. When nearly full grown, tie the outer leaves together over the center, in order to blanch the heart of the plant. By covering every few days a succession may be kept up.

Green Curled This is the hardiest variety, and very desirable for the home and market garden. The deep green leaves are beautifully cut and curled, easily blanched, and become very crisp, tender and fine flavored.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

KALE

Borecole. Kale and German Greens are general terms applied to those classes of cabbages that do not form heads, but are used in their open growth. Some of the varieties are the most tender and delicate of any of the cabbage tribe. They are hardy and are not injured by the frost.

CULTURE.—As far north as New York they may be sown in September and treated like spinach, or they may be planted and treated like late cabbage, and will continue growing until very late in the season. In the south they will live and grow throughout the winter without protection. It is better not to cut or handle them when frozen, but if this is unavoidable, thaw them out in cold water. The young shoots which start up in the spring from the old stumps are very tender and make excellent greens.



KALE—DWARF CURLED SCOTCH, OR GERMAN GREENS.

Dwarf Curled Scotch or German Greens

Plant low and compact, but with large curled leaves, cut and crimped until the whole plant resembles a bunch of moss. It would be well worthy of cultivation simply for its beauty. One of the best sorts for use, and when well grown and cooked is one of the most palatable of vegetables.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

Plant low and compact, but with large curled leaves, cut



KOHL RABI

The Kohl Rabi is a vegetable between the cabbage and turnip, and combines the flavor of each. The edible part is a turnip-shaped bulb formed by the enlargement of the stem. When used for the table this should be cut when quite small, as it is then very tender and delicate, but if allowed to reach its full size it becomes tough and stringy.

CULTURE.—Sow in light, rich soil, as early as possible, in drills sixteen inches apart, and, when well established, thin to six inches apart in the row. One or two plantings at intervals of ten days will give a succession until hot weather, when they fail to grow well; but plantings may be made the latter part of July for fall use.

Early White Vienna

Very early; small, handsome, white bulb. This is the very best early variety for table use.

Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.

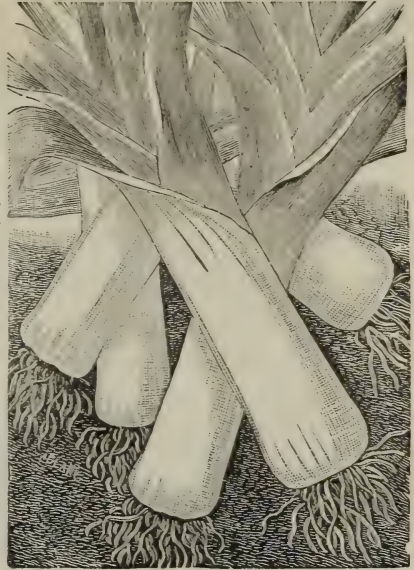
LEEK

Large American Flag

Belongs to the onion family. Sow the seed and care for the young plants as for onions, but they need a little more room in order to develop fully. When the young plant is about the size of a goose quill, transplant to a prepared bed in rows one foot apart, and four or five inches in the row. Set the roots deep and draw the earth to them when cultivating, so that they may be well blanched by the time they are fit for use.

A variety which has become very popular with some market gardeners on account of its being larger than the London Flag.

Pkt. 5c; oz. 15c; ¼ lb. 40c; 1b. \$1.40.



LETTUCE

CULTURE.—Lettuce ought to be grown rapidly, and therefore it should be sown in a rich, thoroughly prepared soil. For early crop sow under glass from November to February, and thin out as necessary to prevent crowding. Keep at a moderate heat, and give all the air and light possible. For early, outdoor culture, start plants in the fall, protecting them as needed with frames or coarse cotton, or start under glass from January till March and harden off before setting in the open ground. This should be done as soon as the ground and weather permit. For general crop, sow outdoors as early in spring as the ground can be worked in drills eighteen inches apart, and thin the young plants to four inches apart in the row. As the plants begin to crowd, thin them out and use as required. In this way a much longer succession of cuttings may be had from the same ground. Sow at intervals of from two to three weeks throughout the summer for a continuous crop. In this, as in every other garden crop, thorough cultivation is essential.

We make a careful trial of the various varieties of lettuce, both old and new, each season, and feel sure that our list embraces all the kinds that are necessary to give a constant supply of the best quality.

Varieties marked **A** are particularly adapted for culture under glass and for early spring use.

Those marked **B** are sometimes grown under glass, but are especially desirable for outdoor summer culture.

CABBAGE OR HEADING LETTUCE

Early Tennis Ball

A (Seed Black). A first class variety, and one of the best head lettuces for forcing under glass or early planting outdoors. Plants medium size, having thick, dark green leaves, and when well grown forming very solid heads, the inner leaves being blanched to a rich creamy white, and exceedingly crisp, tender and rich flavored. Not of much value for outdoor culture, as it runs up to seed quickly in hot weather. This is also known as Stone Tennis Ball, on account of its exceedingly solid head.

Pkt. 5c; oz. 10c; ¼ lb. 25c; 1b. 80c.

Big Boston

A (Seed White). A very popular variety with those gardeners who want a large heading, forcing sort, and also for outdoor winter culture. The plants are large, very hardy and vigorous, with broad, comparatively smooth, thin and very hard leaves, which are bright, light green in color, and when well grown are quite tender. Indoors this forms a solid head, while outside it is less distinctively a heading sort. This is grown in the south as a winter lettuce.

Pkt. 5c; oz. 10c; ¼ lb. 30c; 1b. \$1.00.

LETTUCE—Continued

CABBAGE OR HEADING

California Cream Butter or Royal Summer Cabbage ☞

A (Seed Brown). A strong growing sort, with large, green leaves, sometimes marked with brown dots. It forms a very solid head of rich, creamy yellow leaves, which are very thick, tender and of splendid quality. This sort is very hardy and is sometimes called Winter Lettuce.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

New Iceberg

B (Seed White). Quick Growing. Heads Hard and Handsome. Tender and True.

There is no handsomer or more solid cabbage lettuce in cultivation; in fact, it is strikingly beautiful. The large, curly leaves which cover the outside of the solid heads are of a bright light green. The unusual solidity of the heads is insured by the large, white main ribs of the leaves, each of which, curving strongly into the center, acts like a truss, making it impossible for the leaves to open outward and expose the center, which consequently, is always well blanched. It matters not whether in the early spring or the hottest days of summer, the leaves are always **crisp and tender.**

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.



CALIFORNIA CREAM BUTTER.

Improved Hanson ☞



IMPROVED HANSON LETTUCE.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

B (Seed White)—This is the most popular lettuce on our list and its superior is not on the market. Every year increases the already wide demand for our improved Hanson strain. It is an ideal lettuce in all respects. The slightly curled leaves are of a beautiful green color, while the inner head presents a white appearance and is as tender and crisp as though blanched. It forms a very large head, sometimes exceeding 5 lbs. in weight. It

is wholly free from bitter taste, having a rich and sweet flavor, even to the outer leaves. It resists heat and drought wonderfully well, and is a perfect open air lettuce for amateurs and market gardeners. It cannot be overpraised, is the verdict of our many customers who plant and depend upon it annually.

“PURITY SEEDS” FOR THE GARDEN, FIELD AND FARM

LETTUCE—Continued

Salt Lake Market Lettuce

Very Large, Extremely Crisp, Hard heading, and Extra Long Standing



B (Seed White) This Grand "New Lettuce" is the best introduced in years. The plants grow to a very large size, fully as large as the Deacon or San Francisco Market, are lighter in coloring and much sweeter and milder in flavor, thus making an excellent variety to come on after Iceberg.

In good soil, with ordinary cultivation, the plants grow **twelve inches across**, and make large closely folded heads fully eight inches across. The large outer leaves are a light green and grow closely about the head. The large heads are slightly flattened at the top and closely folded, so that the **interior leaves are blanched to a pure white and are always crisp and brittle.**

While essentially a mid-summer variety, this new lettuce is equally desirable for early spring to a larger size than they do during the summer, and remain in a fine condition for table use much longer than will the smaller heads of the earlier sorts.

Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

B (Seed White.) This magnificent butter lettuce is unsurpassed for family garden or for market. With The Deacon even the amateur gardener can raise fine, solid, nicely blanched heads equal to any the market affords. In our climate seed should be sown during the spring for early summer use and during August for fall heading. It stands hot weather better than any other of the rich butter varieties, and seldom becomes acrid in flavor, even under the greatest summer heat. Plants grow quickly and make firm heads, nearly as large and tight as a cabbage, there being but few outer leaves when the head is fully grown. The heads are light green outside, while the inner blanched portion is a beautiful cream-yellow, of delicious, rich buttery flavor. It is the result of more than forty years' careful selection in the garden of a private family.

Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

San Francisco Market or Deacon



DEACON LETTUCE.

LETTUCE—Continued

Lettuce, Curled or Loose Leaved

Grand Rapids

A (Seed Black). As a lettuce for greenhouse forcing, this variety undoubtedly stands at the head of the list, being of quick growth, little liable to rot, and standing for some days after being fit to cut. The plant is upright, and forms a loose head or cluster of large, light yellowish-green leaves, slightly crimped and blistered and rather thin. It will stand shipping long distances better than most sorts. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 80c.



Early Prize Head

B (Seed White.) This old standard variety is still the best of the large, thin-leaved, clustering sorts for the home garden, but it is not a good kind to ship long distances, as the leaves are so tender that they are easily spoiled in handling. The leaves are very large, crimped, bright green tinged with brownish red, and are exceedingly tender, crisp and sweet, forming a large, loose head.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 80c.

Denver Market

B (Seed White). An early variety of great merit. Forms large, solid heads of a light green color, and is slow to run to seed. The leaves are beautifully curled and crimped, and are tender and fine flavored. Its peculiar, Savoy-like markings distinguish it from all other varieties.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

Early Curled Black Seeded Simpson

B (Seed Black.) The best of the non-heading lettuces. An old and popular standard sort, of large size and highest quality. It may be sown thickly and cut when the plants are very young. Leaves broad, forming something of a head, and are frilled and blistered. Light green in color with inner leaves almost white; tender and well flavored, and exceedingly sweet; good for forcing under glass or for spring and early summer culture in the open air. Resists heat and remains long in edible condition. We can recommend our strain of Black Seeded Simpson to any one desiring a first-class lettuce.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 80c.



LETTUCE—Cos or "Celery"—"Salad Romaine"

The Cos Lettuces are distinct from the preceding sorts in having long, narrow spoon-shaped leaves, which usually fold into loose, sugar loaf shaped heads. When the plants do not "head" naturally during very dry weather, the tips of the leaves may be gathered together and loosely tied, which will blanch the interior. On account of their exceeding crispness, tenderness and delicate flavor, they are becoming more and more popular in this country.

LETTUCE—Continued

Early White Self Folding

(Seed White.) A distinct Cos lettuce which does not need tying up. The leaves are yellowish-white in color,

long, narrow, upright, folding into a solid head like that of an Early York Cabbage, and very crisp and tender. This is truly a self-blanching lettuce of superior flavor. Sold also as Trianon. Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 80c.

MARTYNIA

A strong growing, hardy annual plant with curiously shaped seed pods, which, when young and tender, are highly prized for pickling. The pods are produced in great abundance, and should be gathered when less than half grown, as after the

hardening of the flesh they are worthless.

Proboscidea

The common variety. Sow in rich, warm soil when danger of frost is over, in drills three feet apart, and thin the plants out to two feet in the row.

Pkt. 5c; oz. 30c; ¼ lb. 85c; lb. \$3.00.

MUSK MELONS

CULTURE.—Cultivate as recommended for cucumbers, except that the hills should be six feet apart. Rich earth for the young plants is far better than manure, but if the latter must be used, see that it is well rotted. If the plants grow very rank, more and finer fruit will be secured by pinching off the ends of the shoots when about three feet long. The quality of melons of all varieties is largely dependent upon conditions of growth and ripening. Unhealthy vines or unfavorable weather produces fruit of comparatively poor flavor.

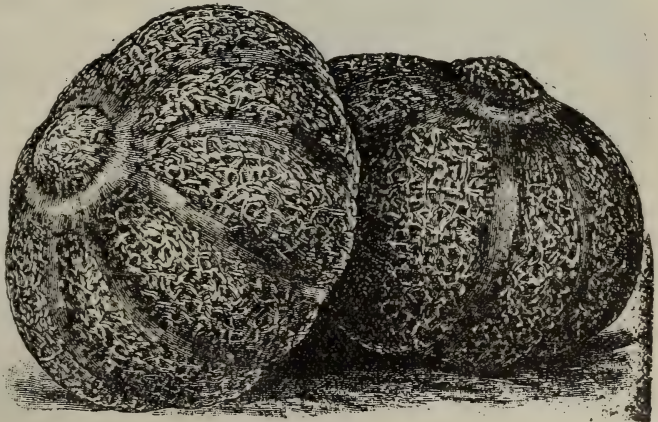
GREEN FLESHED VARIETIES

Norfolk Button

New Jersey Improved "Button" Strain of the Extra Early Jenny Lind Musk Melon

A new favorite. This is a new extra early form of the Jenny Lind; of the same size as the parent sort, but is earlier to reach maturity, and is hence more valuable. It has the same green flesh, spiciness and sweetness as the parent form, but shows a gain in the direction indicated, being ready for market considerably before the first Jenny Linds. The name Norfolk Button is derived from its place of origin, as well as on account of the well developed button or projection at the blossom end, as shown in the illustration. The market gardeners and the farmers at Norfolk, Virginia, have for some years made money with this splendid strain of Jenny Lind, and it became so well known and so famous as to require a distinctive title apart from its original name. It is a sort that cannot be overlooked by money-making gardeners, for it is in high commercial favor, and takes top prices. We are inclined to think that in addition to extreme earliness the Norfolk Button is entitled to credit for superior depth of flesh and more netted specimens.

Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.



NORFOLK BUTTON.

"PURITY SEEDS" ONCE SOWN, ALWAYS GROWN

MUSK MELONS—Continued, Green Fleshed Varieties

This variety is a selection from an old Eastern favorite, the Netted Gem, and now much improved through change of climate and soils, being extensively grown and shipped in carloads to all the larger markets of the East from the neighborhood of Rocky Ford, Colorado, from whence it gets its name.

Rocky Fords are certainly famous in the fancy markets, and are great sellers. They are of convenient size, and their firmness and shape, favor them as shippers. As to quality, they appeal to the taste of epicures everywhere, and hence are in brisk demand, and find a prominent place on counters and shelves of fashionable fruit stores and market stands. The melon is oval in shape, slightly ribbed and covered with a coarse netting. The flesh is thick, green in color, inclining toward yellow at the center, and has a most appetizing flavor and aroma, and is very sweet and juicy. Flesh is both tender and firm; tender enough for the table and firm enough to stand shipment. The rind is elastic, but not hard. It is unquestionably one of the finest early melons and best for market gardeners and shippers as well as for the home garden.

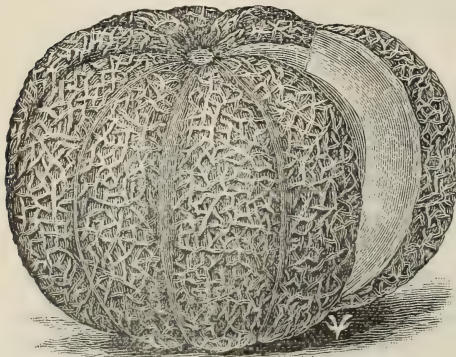
Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.

The Great Rocky Ford Musk Melon

Best and Purest Strain of Seed. Actually Grown at Rocky Ford, Colorado. Most Fashionable Cantaloupe on the American Market.



THE GREAT ROCKY FORD.



EXTRA EARLY HACKENSACK.

Extra Early Hackensack

We offer under this name a very distinct stock, different and much superior to that often sold as Extra Early Hackensack. The fruit is medium sized, nearly round, with deep ribs and very coarse netting. The flesh is green, a little coarse, but very juicy and sweet.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 80c.

Baltimore Market

It is in brisk demand by hotels and restaurants in the Eastern cities during its season, on account of its superior table qualities. It is as well suited to the amateur as to the market gardener.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 75c.

Also called Acme or Baltimore Citron. Quite early and very large and showy; pointed at the ends, strongly netted and with thick green flesh of rich flavor and aroma.

Anne Arundel

This is an improvement on the well-known Acme or Baltimore Market, growing to double the size, with thicker green flesh. It is ready for picking immediately after the extra early sorts, is a heavy yielder and bears shipment well, its oblong shape enabling it to resist pressure much better than the rounder melons. A specially valuable quality is the hardness of the vine and its freedom from the blight. It will often continue to bear good fruit when other vines have entirely succumbed to unfavorable weather.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 75c.

MUSK MELONS—Continued

This variety originated with one of the most successful melon growers in the country, who reports that when planted for market the fruit has brought him nearly twice as much per acre as he realized from any other sort. He has marketed the fruit under the name of Petoskey melons, and prefers that the variety be known by that name rather than his own.

In this new sort are combined all the good qualities of the Notted Gem and the Osage, the varieties from which it originated. The fruit is oval, about five inches in diameter, and in shape and general appearance similar to the well-known Notted Gem or Rocky Ford. The flesh is firm and is a rich orange red color like that of the Osage, but is even sweeter and more highly flavored, retaining its good qualities quite to the rind.

We think it really has no equal as a market melon for professional melon growers and it is one of the very best sorts for the home garden.

It is rare that a musk melon of such superlative quality is a good market or shipping sort, but the firm, solid flesh and the thin but strong rind of this sort make it the best shipper we know of, while it is just the size for hotel and table use.

Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

ORANGE FLESHED VARIETIES

Petoskey or Paul Rose Musk Melon

Unsurpassed in Quality and Unexcelled for Shipping



PETOSKEY, OR PAUL ROSE.

Defender Musk Melon

A splendid variety. It is one of the very best yellow fleshed sorts, and in some respects is far superior to any of this class. The medium sized fruit is oval in shape, slightly ribbed, covered with gray netting. The flesh is firm, fine grained, rich, deep yellow, darker than that of the Osage, and of higher flavor. The flesh extends to the rind and retains its color and quality quite to the outer shell, which though thin, is very hard and firm, so that one can remove the edible portion with a spoon, leaving a rind no thicker than that of an orange. The vine is vigorous and very productive. The fruit, because of the hard, firm rind, keeps and bears shipment remarkably well. We know of no yellow fleshed sort so desirable for either the home or market garden.

Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.



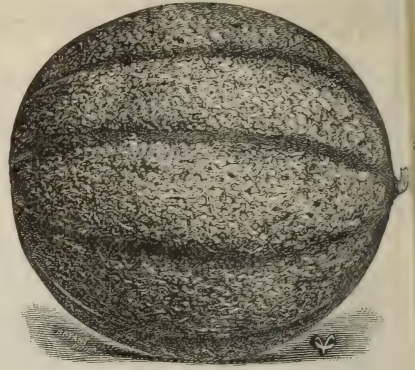
MUSK MELONS—Continued

Osage or Improved Miller's Cream

This melon has made its way into public favor from the market rather than the garden, and is highly prized by those who like an exceedingly high flavored Melon.

It is medium sized, oval, slightly ribbed, dark green in color, covered more or less with shallow netting. The flesh is deep salmon color and very thick, there being but a slight cavity in the center of even the largest fruit. A favorite variety for the market.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 75c.



OSAGE or IMPROVED MILLER'S
CREAM.

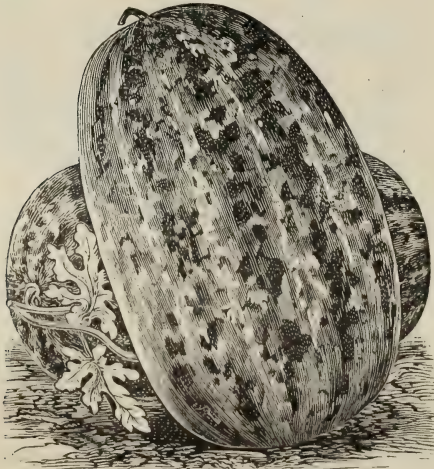
"Banquet"

This superb melon represents years of careful selection and improvement of a stock of Musk Melons at the hands of the largest and most experienced grower of melons in the world. The raiser regards it as his greatest production, and likely to supercede all other red-fleshed melons. The "Banquet" is a medium sized melon, flat at both ends, and more beautifully netted than any known variety. In quality it has no equal; the flesh is uniformly deep and of that granulated character that always indicates a good melon; the color is a dark, rich salmon. It will produce more fine edible melons to a given area than any other variety.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 75c.

WATER MELONS

CULTURE—In Water Melon culture it is essential to get good, strong vines early in the season. These may be secured by forming large, well drained hills of earth, about eight feet apart, made very rich with an abundance of well-rotted manure, which should be thoroughly mixed with the soil, for if left in a mass it will lead to the plants burning out under the hot sun. In these hills plant the seed as soon as the ground is warm and dry and carefully protect the young plants from insects, and hasten their growth by the use of liquid manure.



PHINNEY'S EARLY.

Early Fordhook ♣

Without a Rival—The Best Early Melon of
Good Size.

This is the earliest large-fruited melon in cultivation. The fruits are of good size, rather short and blocky in form, with large diameter. Skin dark green, occasionally with stripes of light green. Flesh bright, red, crisp, sweet and of splendid quality. Rind quite thin, but skin tough, making an excellent shipping variety.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 75c.

Phinney's Early

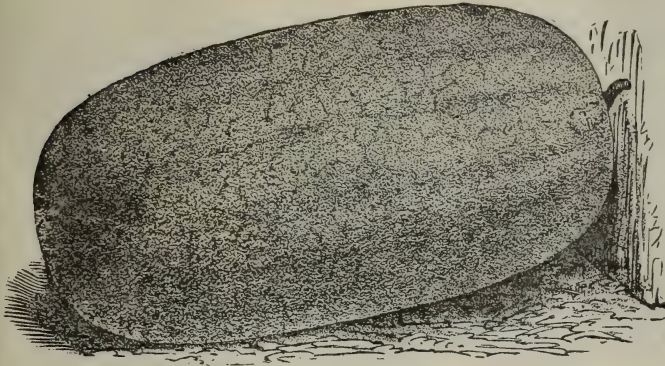
A valuable variety for use in the North; hardy and a sure cropper. Vines vigorous and productive, fruiting quite early; fruit medium sized, oblong, smooth, marbled with two shades of green; rind thin; flesh pink, very sweet, tender and crisp.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.

THE GARDENER'S FRIEND—"PURITY SEEDS"

WATER MELONS—Continued

Jordan's Gray Monarch or Long White Icing ☞



The exterior color of this fine melon is a light green, though its mottled markings make it appear gray. The flesh is deep red in color, and equal or superior in quality to the old Icing, from which it is derived. It differs in shape as well as in size from its parent, but lacks none of the virtues of that sweet-flavored variety. Specimens of Gray Monarch weighing 60 to 70 lbs. have been produced and it has become widely popular.

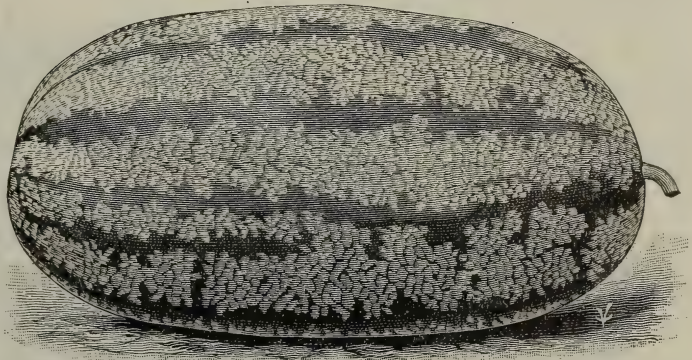
Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

McIver's Wonderful Sugar ☞

The Sweetest of All

This is of Southern origin, and has proven to be one of the very best melons in cultivation. It excels both in beauty and lusciousness, being exceedingly sweet and juicy. The melons attain great weight and large size; oblong in shape, the rind showing broad stripes of light and dark green. The flesh is a rosy pink, perfectly solid and stringless from rind to core; very crisp and of delicious flavor. For the home garden or general market it is unrivaled.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.



McIVER'S WONDERFUL SUGAR.

The Dixie

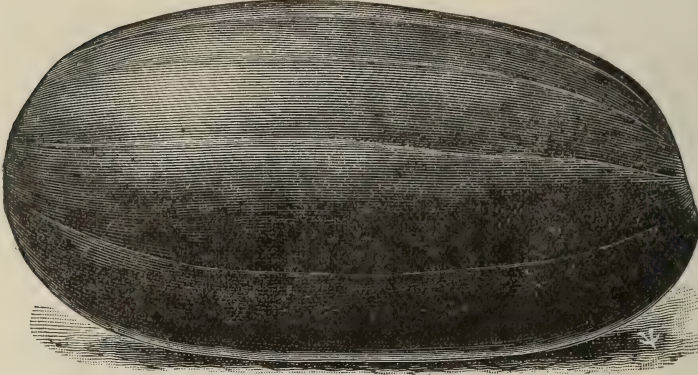


A watermelon of highest quality and value. The size is large, specimens weighing 50 lbs. being not infrequent. The flesh is scarlet, of extra fineness, firmness and good quality. A noteworthy and very valuable feature of this watermelon is the fact that the rind, though thin, is almost impenetrable, giving it remarkable keeping qualities. The variety is one of the most prolific known, often producing 6 to 8 large melons on a single vine. The vines root at the joints, and thus become more drought resisting and vigorous. The Dixie is a cross between Kolb's Gem and old fashioned Mountain Sweet. It surpasses the former in shipping qualities, and fully equals the latter in point of exquisite flavor, and is ten days earlier than either. It is a far better keeper than either parents, by reason of its impenetrable rind.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.

WATER MELONS—Continued

Kleckley Sweets ◻



KLECKLEY SWEETS.

rind being only about half an inch in thickness. The seeds are white and rather long in shape; being in two rows lying close to the rind, they leave a very large open heart which does not crack open when ripe, as is the case in many large melons. The rich, bright scarlet flesh is crisp, sugary and melting to the highest degree, being entirely free from any stringiness. The rich coloring of the flesh, together with its luscious sweetness, combine to make it the finest table melon now in cultivation. **Pkt. 5c; oz. 10c; ¼ lb. 25c. 1b. 75c.**

The finest of all water melons for home use or nearby market. The only drawback to the variety is that the fruits are too tender to stand shipment, the rind being so brittle that it is apt to split open in cutting the fruits for the table. The vines are strong and vigorous and the fruits grow uniformly to quite large size; oblong in form, eighteen to twenty inches long and ten to twelve inches in diameter, rather tapering at the ends. The skin is a rich dark green, while the flesh is bright scarlet, ripening close to the skin, the

Cuban Queen

Fruit medium sized to large, globular or oval; skin striped light and dark green in sharp contrast; rind medium thick, but stands shipment well. Flesh bright red, solid, very crisp and sugary.

Pkt. 5c; oz. 10c; ¼ lb. 20c; 1b. 50c.



Sweet Heart

It has no Equal as a Shipping Melon

Vine vigorous and productive, ripening its fruit early. Fruit large, oval, very heavy, uniformly mottled light and very light green. Rind thin but firm. Flesh bright red, firm, solid but very tender, melting and sweet. Fruit retains its good quality for a long time after ripening.

Pkt. 5c; oz. 10c; ¼ lb. 20c; 1b. 60c.

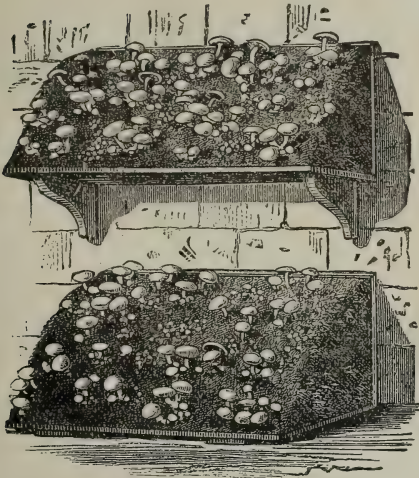
CITRON

Grows uniformly round and smooth, striped and marbled with light green. Flesh white and solid; seeds red. It should be borne in mind that this variety is not used for eating in the raw state, but for preserves, pickles, etc.

Pkt. 5c; oz. 10c; ¼ lb. 20c; 1b. 60c.

Note.—When ordering melon or other seeds by the pound, to go by express or freight, purchaser paying transportation charges, 10 cents per pound may be deducted from prices quoted.

MUSHROOM



The Mushroom is an edible fungus of a white color, changing to brown when old. The gills are loose, of pinkish-red, changing to liver color. It produces no seed, but instead, a white fibrous substance in broken threads, called spawn, which is preserved in horse manure, being pressed in the form of bricks. Thus prepared it will retain its vitality for years.

Mushroom beds may be made in a warm dry cellar or in any building where the frost does not penetrate, and in the open air during the summer and fall months. Having procured the spawn, the next thing to be attended to is to make preparation for the beds. About a fortnight or three weeks before the beds are to be made, collect a quantity of fresh horse manure without the straw; place it in a heap under cover, and as it heats keep turning it over once or twice a week, until the fiery heat has been exhausted, which will require from ten to fourteen days' time. When the manure is in a condition to be made up, lay out your bed according to your requirements, say 3 feet wide, 10 feet long and from 2 to 3 feet deep; beat it well down with the back of the spade as the process of building goes on. When the bed has been made some time, say a week or thereabouts, and the heat sufficiently declined to a temperature of 65 or 75 degrees, the spawn may be put into it. Break the spawn in pieces 2 inches

square, and put them 6 inches apart all over the bed, then cover the bed with 2 inches of rich soil, the stronger the better, but of a loamy quality, beating it down firmly with a spade. The soil used for this purpose should be in a pliable condition, and not too wet or over dry. Cover the bed with a foot of dried straw or hay; examine once a week to see if the manure is not heated while in this condition; if so, it will destroy the spawn; which will require spawning a second time. If everything goes on well, you may expect mushrooms in about five or six weeks. When the soil looks dry, give a gentle watering with tepid water, using a rose on the watering pot. If the beds are made out of doors, protect them from rain by covering with shutters or sashes. Good crops of mushrooms can be obtained by spawning the hot-beds in spring. They can also be raised in pots, boxes, or in fact in anything capable of keeping the materials together, and placed in a cellar, closet, greenhouse or graperly. Ten pounds will spawn about 10 square feet. Spawn, 30c. lb., postpaid.

MUSTARD

Mustard is not only used as a condiment, but the green leaves are used as a salad, or cut and boiled like spinach. The culture should be the same as that of cress.

GIANT SOUTHERN CURLED. The leaves are light green, mild and tender when young.

Oz. 5c; $\frac{1}{4}$ lb. 10c; lb. 60c.



NASTURTIUM

Sow after the ground is warm, in drills one inch deep, by the side of a fence, trellis work, or some other support, to climb upon. They will thrive in good ground in almost any situation, but are more productive in a light soil.

Mixed Garden

Cultivated both for use and ornament. Its beautiful orange colored flowers serve as a garnish for dishes, and the young leaves are excellent for salads. The green seed pods preserved in vinegar make a pickle greatly esteemed by many.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; lb. 75c.

OKRA

This is an annual from the West Indies, cultivated for its young seed pods which are used in soups, or stewed and served like asparagus. It is highly esteemed in the South for making gumbo soup. The pods when young and tender, may be sliced in sections and strung on a thread and hung up in the shade to cure like dried apples; in this condition they can be used for soup at any time.

CULTURE.—Plant in hills about four feet apart, putting six to eight seeds in a hill, and after the plants are well started cut out all but two. The dwarf sorts can be planted much closer in hills, two to three feet apart or in drills two feet apart, thinning the plants to about one foot apart in the row. Gather the pods when quite green, and about an inch and a half long.

White Velvet

This variety is a great improvement on the old White or the Green. The plant is of medium height, bearing a large crop of white, smooth, tender pods which retain their tenderness until nearly full size.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.

ONIONS

The Onion not only contains considerable nutriment and has valuable medicinal properties, but is most useful in counteracting the bad effects of a sedentary life. The disagreeable odor it imparts to the breath may be avoided in a great measure by thoroughly cooking, or by eating a few leaves of parsley.

Good seed is of the utmost importance. Fully realizing this, we make a **specialty of the best Onion seed.** A dollar saved on the purchase of the seed is likely to be lost many times over when the bulbs are harvested. The first cost of the seed is comparatively a small item as compared with the expense involved in the proper preparation, fertilizing and cultivation of the soil. This cost is fully as great, and frequently more cultivation is required to raise a crop of inferior bulbs from poor seed than to harvest a crop of fine, evenly ripened bulbs from a good strain of seed. Our Onion seed is grown only from choice selected bulbs, examined critically before being set out to produce seed. In **quality it is vastly superior** to much that is put on the market, and which is grown chiefly with the object of producing the largest quantity of seed per acre.

Although Onions are raised from sets and from division, by far the best and cheapest mode of production is from seed. The facility with which seed is sown, and the superior bulbs which it produces, recommend its general use.

HOW TO RAISE ONIONS

THE SOIL.

A crop of onions can be grown on any soil which will produce a full crop of corn, but on a stiff clay, very light sand or gravel, or on some muck or swamp lands, neither a large nor a very profitable crop can be grown. We prefer a rich loam with a slight mixture of clay. This is much better if it has been cultivated with hoed crops, kept clean from weeds and well manured for two years previous, because if a sufficient quantity of manure to raise an ordinary soil to a proper degree of fertility is applied at once it is likely to make the onions soft. The same result will follow if we sow on **rank, mucky ground, or on that which is too wet.**

MANURING.

There is no crop in which a liberal use of manure is more essential than in this. If it is too rank, it is quite sure to make soft onions with many scallions. It should be of the best quality, well fermented and shoveled over at least twice during the previous summer to kill weed seeds. Of the commercial manures, any of the high grade, complete fertilizers are good for ordinary soils, but very rich soils are often benefited by fine ground bone, and mucky ones by a liberal dressing of wood ashes.

PREPARATION.

Remove all refuse of previous crops in time to complete the work before the ground

freezes up, and spread the composted manure **evenly** at the rate of about fifty cartloads to the acre. This should first be cultivated in, and then the ground plowed a moderate depth, taking a narrow furrow in order to thoroughly mix the manure with the soil. Carefully avoid tramping on the ground during the winter. Cultivate or thoroughly drag the soil with a heavy harrow as **early** in the **spring** as it can be worked, and then in the opposite direction with a light one, after which the entire surface should be made fine and smooth with hand rakes or some such implement as a smoothing harrow. It is impossible to cultivate the crop economically unless the rows are perfectly straight; to secure this, stretch a line along one side, fourteen feet from the edge, and make a distinct mark along it, then having made a wooden marker, something like a giant rake with five teeth about a foot long and standing fourteen inches apart, make four more marks by carefully drawing it with the outside tooth in and the head at **right angles** to the perfectly straight mark made by the line. Continue to work around this line until on the third passage of the marker you reach the side of the field where you began; measure fifteen feet two inches from the last row, stretch the line again and mark around in the same way. This is better than to stretch a line along one side, as it is impossible to prevent the rows gradually becoming crooked, and by this plan we straighten them after every third passage of the marker.

ONIONS—How to Raise, Continued

SOWING THE SEED.

This should be done as soon as the ground can be made ready, and can be done best by a hand seed drill. This should be carefully adjusted to sow the desired quantity of seed about half an inch deep. The quantity needed will vary with the soil, the seed used and the kind of onions desired. Thin seeding gives much larger onions than thick seeding. Four or five pounds per acre is the usual quantity needed to grow large onions. We use a drill with a roller attached, but if the drill has none the ground should be well rolled with a hand roller immediately after the seed is planted.

CULTIVATION.

Give the onions the first hoeing—just skimming the ground between the rows—as soon as they can be seen the length of the row. Hoe again in a few days, this time close up to the plants, after which weeding must be begun. The operation requires to be carefully and thoroughly done. The weeder must work on his knees astride of the row, stirring the earth around the plants, in order to destroy any weeds that have just started. At this weeding or the next, according to the size of the plants, the rows should be thinned, leaving from eight to twelve plants to the foot. In ten days or two weeks they will require

another hoeing and weeding similar to the last, and two weeks later give them still another hoeing and, if necessary another weeding. If the work has been **thoroughly done** at the **proper time** the crop will not require further care until ready to gather.

GATHERING.

As soon as the tops die and fall, the bulbs should be gathered into windrows. If the weather is fine they will need no attention while curing, but if it is not they will need to be stirred by simply moving them slightly along the row. Cut off the tops when perfectly dry, about half an inch from the bulb, and then after a few days of bright weather, the onions will be fit to store for the winter.

STORING.

It will not do to store onions in large piles or masses, particularly in warm weather, if they are the least moist, but if perfectly dry when gathered and they are spread not to exceed two feet in depth, they can be kept in fine condition until spring. Any arrangement will do that will keep them dry and at a uniform temperature of about 32 deg. Fahr., or they may be kept frozen, care being taken not to disturb them. They should be thawed gradually. Repeated freezing and thawing will spoil them.

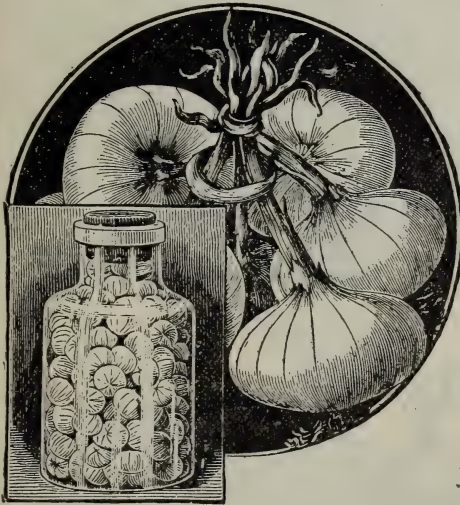
Extra Early Barletta ¶

(EARLY RADISH.)

(The Earliest Onion in Cultivation.)

The bulbs are of a pure paper-white color, very mild and delicate in flavor, from one inch to one and a half inches in diameter and three-fourths of an inch in thickness. On account of its small size, seed may be sown quite thickly and makes an excellent variety for pickling. Bulbs should be dug and dried in the shade as soon as the tops die down, or they will start into fresh growth and take on a greenish hue. The onion is a good keeper. It is the neatest little onion under cultivation.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.



EXTRA EARLY BARLETTA.

Extra Early White Pearl or Bloomsdale Pearl ¶

A beautiful, flat, white skinned variety, one of the earliest of all, and a good keeper. Unsurpassed for bunching. It can be sown in February or March, and will mature a crop very early in the season, or if sown in July, the crop will mature the same season. In the South the seed can be sown in autumn, and large onions produced in March. Known also as Early May.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.



EXTRA EARLY WHITE PEARL, or BLOOMSDALE PEARL.

ONIONS—Continued



WHITE PORTUGAL, or WHITE SILVER SKIN.

Australian Brown

Is of medium size, wonderfully hard and solid, and most attractive for market, both as to form and appearance. They are extremely early in ripening, and never make any stiff-necks or scallions. Every seed seems to produce a good sized onion, and the bulb begins to form very quickly—when the plant is not over three inches high. Planted at the same time as Red Wethersfield, it proved to be nearly four weeks earlier and ripened off more uniformly. From its firmness and hardness, it will keep in good condition longer than any other onion known. The color of the skin is a clear amber brown. So widely contrasted from any other onion is this color that it will be noticed on the market, and when once bought purchasers will most likely call again for "those beautiful brown onions."

Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.25.

White Portugal or White Silver Skin

This is the standard white. See illustration. The bulbs grow to a good size, ripening early and quite evenly. It is a good keeper. The flesh is very mild, the thin skin a clear silver white, of very handsome appearance, if the bulbs are gathered as soon as ripened and carefully dried under shelter away from strong sunlight.

Pkt. 5c; oz. 25c; $\frac{1}{4}$ lb. 75c; lb. \$2.50.



AUSTRALIAN BROWN.



Large Red Wethersfield

This is the standard Red Variety, and a favorite in the East, where immense crops are grown for shipment. Large; skin deep purplish red, form round, somewhat flattened; flesh purplish white; moderately fine grained, and stronger flavored than any of the other kinds. Very productive. The best keeper and one of the most popular for general cultivation. It is more inclined to form large necks if planted in unsuitable soil than the Danvers, but is the best variety on poor or dry soils.

Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.

Mammoth Silver King ¶

The Mammoth Silver King Onion grows to a remarkable size. The bulbs are of attractive form, flattened, but thick through. The average diameter of the onions is from 5 to 7½ inches—thus making the circumference from 15 to 22 inches. Single bulbs often attain weights of from 2½ to 4 pounds each. The skin is beautiful silvery white; the flesh is snowy-white, and so sweet and tender that it can be eaten raw, like an apple. They mature early.

Pkt. 5c; oz. 25c; ¼ lb. 75c; 1b. \$2.50.



MAMMOTH SILVER KING.



OREGON DANVERS.

Oregon Danvers

For a number of years the State of Oregon has produced a yellow onion, differing in some important particulars from any other onion on the market. In shape it is round and full, not quite as thick as the Yellow Globe, but of remarkably handsome form. In color it is distinctively bright and attractive, but its chief recommendation lies in its extreme earliness, its extraordinary productiveness, its wonderful qualities as a long keeper and its mild and delicate flavor. Sets grown from the seed are the brightest, heaviest and soundest we have ever seen anywhere. The onion growers of the Puget Sound country will use no other variety, even at one-quarter the price, when this is obtainable. And so great has been the local demand for it that of late growers have been entirely unable to supply the home requirements. We take pleasure in offering this onion to the general trade as being a variety well worth establishing everywhere as a leading market sort. We especially recommend it to large growers of Onion Sets.

Pkt. 5c; oz. 25c; ¼ lb. 75c; 1b. \$2.50.

Golden Globe Onion

Ball-like Form. Earliest and Best
Long-keeping Onion

GOLDEN GLOBE is the earliest of all globe-shaped onions, and in extra long-keeping character equals the famous Australian Onions. The bulbs are of a beautiful elongated globe, with no tendency ever to become flattened; average weight seven to nine ounces. The skin is thin, uniformly of a beautiful light golden yellow. It has the smallest top of any onion we have ever grown—generally no longer or thicker than a lead pencil, while the uniformity with which the bulbs cure is astonishing. Extremely hard and solid, the pure white flesh is most mild and pleasant in flavor.

Golden Globe is undoubtedly the most valuable new onion introduced in a generation—both for market and the home garden. Its earliness, sure-cropping character, handsome appearance and superb quality will soon make it a favorite everywhere.

Per Pkt. 5c; oz. 35c; ¼ lb. \$1.00; 1b. \$3.25.



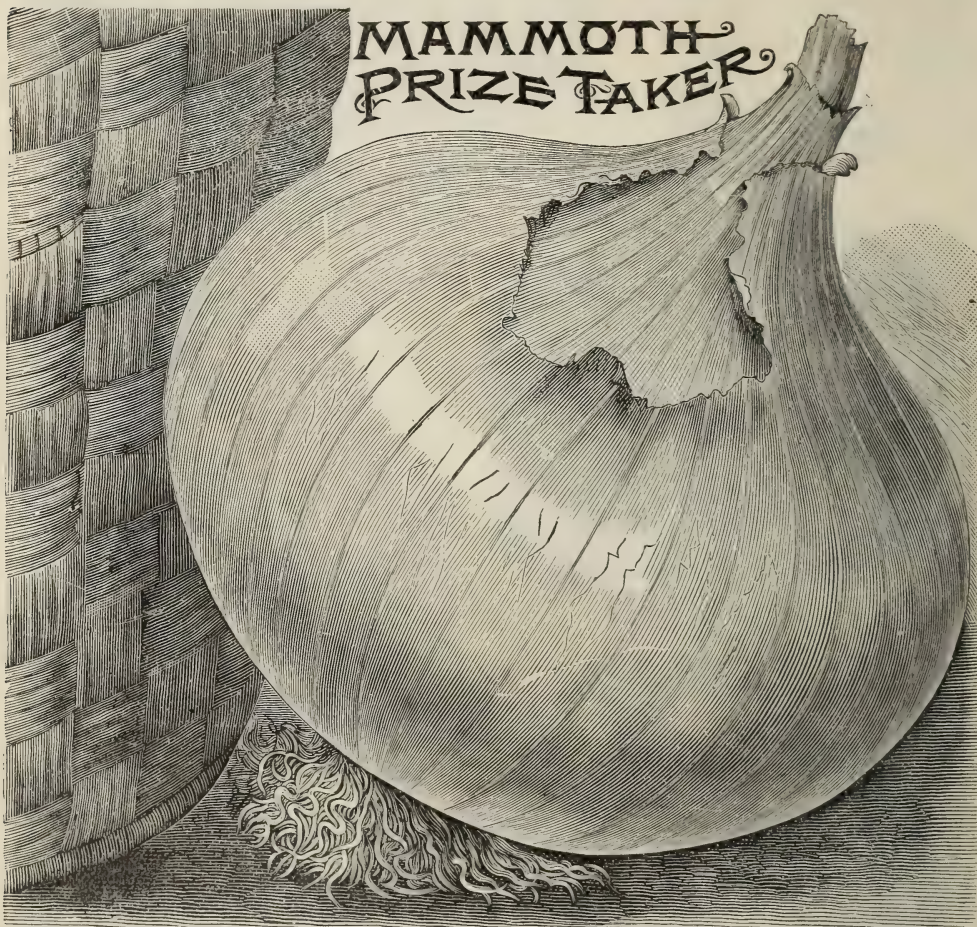
Large White Globe (True Southport Strain)

A very handsome, silvery-white and perfectly ball-shaped onion of large size, commanding the highest prices in the Eastern markets. Flesh firm, fine grained, of mild flavor, and an excellent keeper. Its even, regular size, perfectly globular form, combined with the clear silvery whiteness of the thin skin, make it one of the handsomest onions grown. Owing to its large size, it is later in ripening than the White Portugal, or Silver-skin, the latter being of flattened form.

Pkt. 5c; oz. 30c; $\frac{1}{4}$ lb. \$1.00; per lb. \$3.00.

Large Red Globe (True Southport Strain)

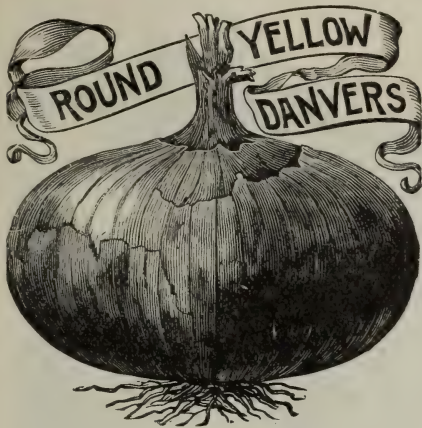
This variety produces large perfectly globe-shaped onions of the same size and handsome form as the preceding variety, but the color is an extra rich deep red. It brings the highest prices on the market, and is very profitable. It is also known as Globe Wethersfield, but is not so early nor quite so sure to ripen well in unfavorable seasons as the Large Red Wethersfield, which is of the flattened type. It should not be planted in heavy wet soil. Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; per lb. \$2.00.



Mammoth Prize Taker

The grandest variety grown for the American climate. Its tenderness and mildness of flavor are unequaled even by the Bermuda varieties. In size it is not excelled by the enormous varieties from Spain. The Prizetaker Onion has now been several years on the market, and is recognized as one of the best standard varieties. Rarely has any vegetable attained prominence more rapidly. Nothing short of actual knowledge of this variety will convey a really adequate idea of its great value, whether considered as a variety for commercial or private culture. Its immense size will recommend it to all, particularly when it is known that its keeping qualities are unexcelled. The exterior color is pale yellow, and the interior clear sparkling white. It is easily grown, medium early in maturing, mild in flavor. By sowing early in a sheltered spot and transplanting the young plants, it can be grown to an immense size.

Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.



Round Yellow Danvers

A fine productive variety of medium size; skin copper-yellow; flesh white, comparatively mild and well flavored.

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.



Yellow Globe Danvers

This improved variety is pronounced by onion growers—who now grow it in preference to all other onions—the very best strain in cultivation. It is the earliest Yellow Globe variety, large in size, uniformly perfect in shape, and the largest cropper, producing from seed 1,000 bushels per acre with good cultivation. It is also the most reliable for bottoming, and one of the best keepers of all American onions.

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.25.

YELLOW GLOBE DANVERS.

Onion Sets

To raise onion sets from seed, use good ground prepared as for large onions, and sow the seed very thick in broad drills, forty to sixty pounds per acre. If the seed is sown thin, the bulbs will not only be too large for sets, but will not be of the right shape, and if sown thick on poor land, they will be necky and bottle-shaped. When onion seed is sown for sets, the seed may be planted somewhat later than for large bulbs, but fine crops are more likely to come from early sowing.

Yellow Bottom Sets

Treated precisely as top onions are, setting them out in the spring, instead of sowing seed. **Lb. 20c, postpaid.**

Prices by the 100 lbs. on all onion sets are subject to the fluctuations of the market. **The price per single pound will hold good throughout the season, or as long as our stock lasts.**

PARSLEY

Champion Moss Curled

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

CULTURE.—It requires rich, mellow soil. The seed is even slower than parsnip in germinating, and should be sown as early as possible in the spring, in drills one foot apart, and when the plants are well up, thin to one foot in the row. When the plants are about three inches high, cut off all the leaves; the plant will start a new growth of leaves which will be brighter and better curled, and if these turn dull or brown they can be cut in the same way; every cutting will result in improvement. The moss curled variety makes beautiful border plants.

A compact growing, finely cut and much curled variety, of a bright green color. Owing to its fine color and density of foliage, it is much sought.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 60c.



PARSLEY.

PARSNIP

The value of the Parsnip as a culinary vegetable is well known, but is not generally appreciated at its full value for stock feeding. On favorable soil it yields an immense crop of roots, which are more nutritious than carrots or turnips. Roots are very rich in saccharine food, adding to the richness of the milk when freshly dug and fed to cows, as well as greatly increasing the flow of milk.

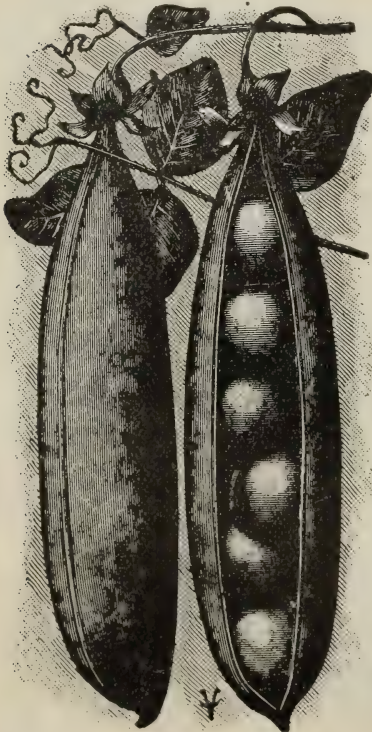
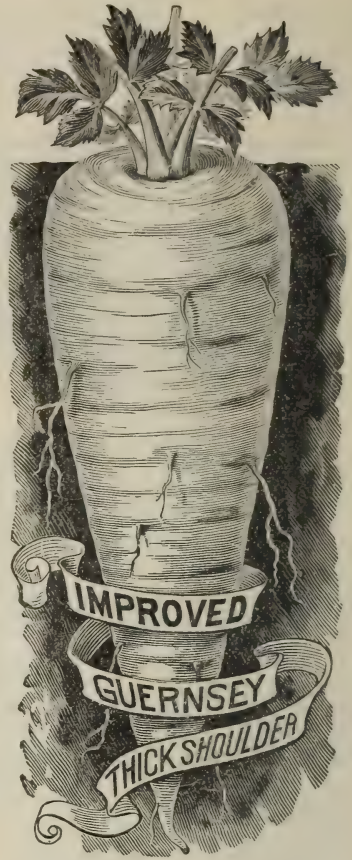
CULTURE.—They do best on a deep, rich, sandy soil, but will make good roots on any soil which is deep, mellow and moderately rich. Fresh manure is apt to make the roots coarse and ill-shaped. As the seed is sometimes slow to germinate it should be sown as early as possible, in drills two feet to two and one-half feet apart; cover one-half inch deep and press the soil firmly over the seed. Give frequent cultivation, and thin the plants to five or six to the foot.

Improved Guernsey

(Improved Half Long. Thick Shoulder.)

A greatly improved and wonderfully fine strain of Guernsey Parsnip, of which our customers are unanimous in praising the fine quality. The roots do not grow so long as the Hollow Crown, but are of greater diameter and more easily gathered. It is a very heavy cropper. The roots are very smooth, the flesh fine grained, tender and sugary, and considered the best for general cultivation. Parsnips are improved by remaining exposed to the frost.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 50c.

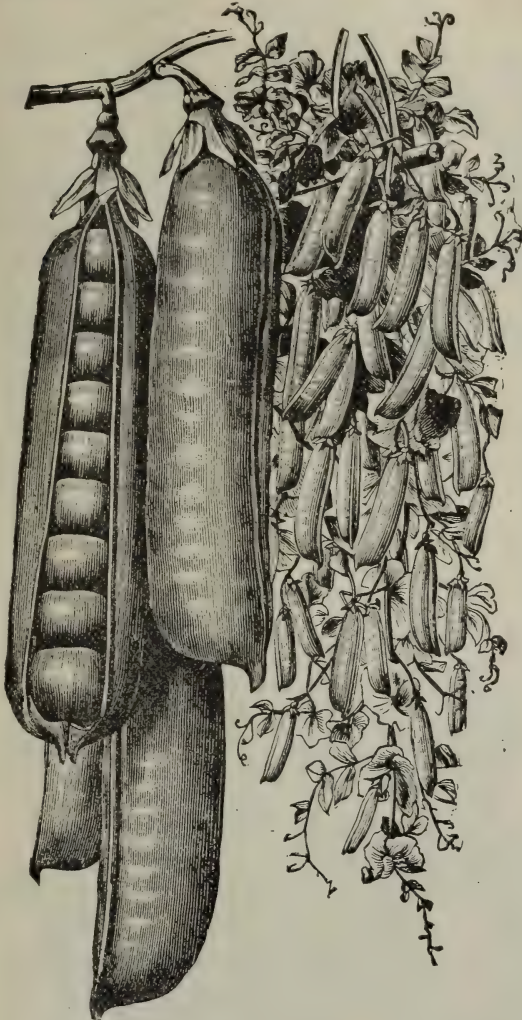


AMERICAN WONDER.

PEAS

CULTURE.—For early peas the soil should be light and warm, but for general crop a moderately heavy soil is better. Fresh manure and very rich or wet mucky soil should be avoided, as they cause a rank growth of vine at the cost of the quality of the peas, and such soil is often the cause of early sorts maturing unevenly. Sow as early as possible a few of the earliest varieties on warm, quick soil, prepared the fall before. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in ripening. The peas will mature earlier if covered only one inch deep, and where earliness is most important they may be treated in that way; but larger pods and more of them will be produced if the seed be planted in trenches three to six inches deep, covered with only one or two inches of soil. When the plants are five or six inches high, fill the trench level with the surface; this will secure deep rooting, prevent mildew and prolong the bearing season. If the peas be covered to the full depth at first, or if water be allowed to stand in the trenches, they will not make a good stand of healthy plants.

PEAS—Continued



NOTT'S EXCELSIOR.

The crop should be gathered as fast as it is fit for use. If even a few pods begin to ripen, not only will new pods cease to form, but those partly advanced will stop growing.

Earliest of All or Alaska ☐

By careful selection and growing we have developed a stock of this smooth, blue pea, which in evenness of growth of vine and early maturity of pods is **unequaled by any other extra early pea.** Vines two to two and one-half feet high, unbranched, bearing four to seven long pods, which are filled with medium sized, bright green peas of excellent flavor. Ripe peas small, bluish green. Matures all the crop at once and is an invaluable variety for market gardeners and canners.

Pkt. 10c; pt. 25c; qt. 40c, postpaid; pk. \$1.75; bu. \$6.50.

American Wonder ☐

A variety nearly as early as the First and Best, with stout, branching vines, about nine inches high, and covered with well filled pods containing seven or eight large, exceedingly sweet, tender and well flavored peas. Dry peas, medium sized, much wrinkled; pale green. We have taken great pains in growing our stock, and know it to be pure and true.

Pkt. 10c; pt. 25c; qt. 40c; postpaid; pk. \$1.50; bu. \$5.50.

Nott's Excelsior ☐

The Best Early Dwarf Pea.

It combines to a wonderful degree the good qualities of the American Wonder and Premium Gem Peas without their deficiencies. The vines are larger and more vigorous than the American Wonder and earlier, and more prolific than Little Gem. The Peas in sweetness and quality are unsurpassed. A most desirable sort for the market gardener, and unsurpassed for the home garden.

Pkt. 10c; pt. 25c; qt. 40c, postpaid; pk. \$1.75; bu. \$6.50.

McClellan's Little Gem

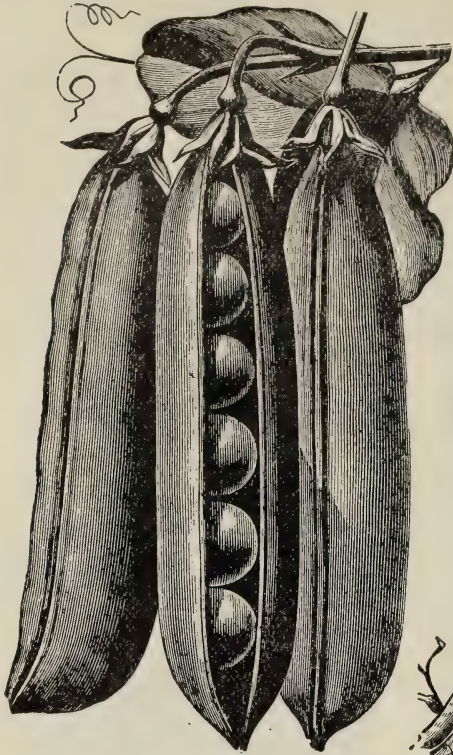
A very desirable, early dwarf, green, wrinkled variety growing about fifteen inches high. When green it is very large, sweet and of delicious flavor.

Pkt. 10c; pt. 25c; qt. 40c, postpaid; pk. \$1.75; bu. \$6.00.

When peas by the pint or quart are ordered by express or freight, 8 cts. per pint, or 15c per quart may be deducted from prices quoted. Pecks and bushels sent by express or freight at purchaser's expense.



McCLELLAN'S LITTLE GEM.

PEAS—Continued

YORKSHIRE HERO.

Yorkshire Hero

A splendid large, wrinkled pea, of first rate quality, 2 to 3 feet high. It has a branching habit, and is an abundant bearer. The pods are large and well filled. It has few superiors as a late cropping sort.

Pkt. 10c; pt. 25c; qt. 40c; postpaid; pk. \$1.50; bu. \$5.00.

Telephone

This fine, second early pea has proved to be a valuable acquisition. Vines vigorous, growing to about four feet high, with large, coarse, light colored leaves, and producing an abundance of very large pods filled with immense peas, which are tender, sweet and of excellent flavor. It comes into use just after the Little Gem, and is one of the best sorts for either home or market. Notwithstanding the large amount of inferior and spurious stock which has been sold, no pea of recent introduction has gained more rapidly in popularity than this, thus showing that it has sterling merit which gardeners appreciate. The stock we offer is prolific and has been carefully selected.

Pkt. 10c; pt. 25c; qt. 40c; postpaid; pk. \$1.75; bu. \$6.50.

Bliss' Everbearing ¶

A variety maturing soon after the Gems, and continuing a long time in bearing. Vine stout, about eighteen inches high, bearing at the top six to ten broad pods. If these are removed as they mature, and the season and soil are favorable, the plant will throw out from the axil of each leaf branches bearing pods which will mature in succession, thus prolonging the season. The peas are large and wrinkled, cook very quickly, are tender, of superior flavor and preferred by many to any other sort.

Pkt. 10c; pt. 25c; qt. 40c; postpaid; pk. \$1.50; bu. \$5.00.



BLISS' EVERBEARING.

PEAS—Continued



IMPROVED STRATAGEM.

Mammoth Melting Sugar

This is a class of pea little known of in this country, but much used abroad, in which the large, sweet brittle and succulent pods have none of the tough inner lining found in the ordinary varieties of garden peas; they are used in the same way as snap or string beans. The best of these edible podded sorts is the Melting Sugar, of which we offer a very fine strain. The pods are very large, straight, extremely tender, fine flavored and are borne in great abundance on vines three or four feet high.

Pkt. 10c; pt. 30c; qt. 50c, postpaid; pk. \$2.25; bu. \$8.50.

FOR FIELD VARIETIES SEE FORAGE AND FODDER PLANTS

PEPPER

The culture for pepper is the same as for egg plant; the plants need quite as much heat to perfect them, though they mature sooner and may be sown a little later. Guano, hen dung, or any other bird manure, hoed into the surface soil when the plants are about six inches high, will wonderfully increase the product and also improve the quality of the fruit.

Red Chili

A late variety used in the manufacture of pepper sauce. The bright rich red pods are about two inches long, one-third to one-half inch in diameter at the base, tapering to a sharp point and exceedingly pungent when ripe. Requires a long, warm season. The plants should be started quite early in hot-beds.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.

Long Red Cayenne

A rather late sort, having a long, slim, pointed pod, and when ripe, of a bright red color. Extremely strong and pungent.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.25.

Ruby King ¶

An improved American sort reaching the largest size, yet retaining the symmetrical shape of the smaller sorts. It is very bright colored, beautiful, sweet and mild-flavored. One of the best for stuffed pickles.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.

Large Bell, or Bull Nose

Our stock of this well-known variety, which is sometimes called Sweet Mountain, is a great improvement on the best stock obtainable a few years ago. Plant vigorous, compact, very productive, ripening its crop uniformly, excellent quality for use in salads and pickles; color bright red when ripe.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.25.

Improved Stratagem ¶

One of the Best and the Largest Podded Sorts.

The Pods are of Immense Size and Uniformly Filled with Very Large, Dark Green Peas of the Finest Quality.

All the good qualities of the Old Stratagem are highly developed in our Improved, and it is vastly superior to the stocks now generally sold as Stratagem. Vine medium height, but very stocky, with very broad light green leaves and bearing an abundance of large handsome pods. The best pea now on the market for those who want **LARGE, SHOWY PODS and Peas, without any Sacrifice in Quality.** One of the best varieties for market gardeners.

Pkt. 10c; pt. 25c; qt. 40c; postpaid; pk. \$1.75; bu. \$6.00.



RUBY KING.

PEPPER—Continued



"CHINESE GIANT."

The first fruits set in a cluster of three to five at base of the plant, and are generally longer than those setting later on the upper branches, although the later fruits are equally as broad. All are **uniformly of "enormous" size.** The flesh is unusually thick and extremely mild—as sweet as an apple; it makes an excellent salad sliced and served like tomatoes. The enormous fruits yield so little seed that the genuine seed must be always high in price.

Pkt. 10c; 3 pkts. 25c; ¼ oz., 35c; ½ oz. 60c; oz. \$1.00.

Chinese Giant ¶

Double the Size of Ruby King and Equally as Mild.

This is the largest and finest mild red pepper. Truckers planting for market will find "Chinese Giant" the most profitable variety they ever handled. Not only is it early in ripening and immensely productive for so large a pepper, but its enormous size will cause it to sell most readily. The plants are vigorous in growth, but of stocky habit, seldom more than two feet in height. They are well branched and thickly set with enormous fruits which appear to hang in clusters—so many being set on the comparatively small plants. Frequently half a dozen fruits will touch each other, as if in a single bunch. The strong growth of the plants and abundant foliage enable them to mature the large number of fruits nearly as early as the popular **Ruby King.** The monstrous fruits are of thick, blocky form of most brilliant glossy scarlet. They grow four to five inches broad at the top and are of equal length, divided into four or more large ridges; when ripe they are indented at the blossom end.

PUMPKIN

Pumpkins are not so particular in regard to soil as melons or cucumbers, but in other respects are cultivated the same, though on a larger scale. They are generally raised between hills of corn, but may be planted with success in fields by themselves.

Sweet Cheese, or Kentucky Field

A most popular variety in the South. Fruit flattened, the diameter being two or three times more than the length; skin mottled light green and yellow, changing to rich cream color as it matures; flesh tender and of excellent quality.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.



SWEET CHEESE, OR KENTUCKY FIELD.

Small Sugar

A handsome, prolific variety; fruits of small size, averaging about ten inches in diameter, of excellent keeping qualities, flattened or slightly ribbed. Skin deep orange yellow, flesh sweet.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

Remember, "PURITY SEEDS" are Unexcelled

PUMPKIN—Continued

Large Yellow, or Connecticut Field, (Big Tom)

Grows to a large size, and is adapted for cooking purposes and for feeding stock. The shape is irregular, some being round and others elongated or flattened. It is of deep, rich yellow color, fine grained and excellent flavor.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.



Genuine Mammoth, or True Potiron

Called also King of the Mammoths. Large Yellow Mammoth, Mammoth \$50.00 Pumpkin, and Jumbo Pumpkin.

The pride taken in growing the largest pumpkin, and the great demand for the seed, explains the multitude of names which this, the Genuine Mammoth Pumpkin, has received. It grows to an enormous size, three feet or more in diameter, and one hundred to two hundred pounds or more in weight. It has salmon colored skin; flesh bright yellow, fine grained and of good quality.

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.



RADISH

Cultivated chiefly for its roots, though the young seed leaves may be used as a salad and the green seed pods for pickles. For the home garden, sow on rich, sandy soil as early in the spring as it is fit to work. For forcing sow in hot-beds, having very rich, sandy soil made perfectly level. Scatter evenly over the surface from sixty to one hundred and fifty seeds to the square foot and cover with one-half inch of soil sifted on, and attend carefully to the watering and airing. If the bed is a good one, the whole crop can be marketed in twenty-one to forty days after planting. In open ground culture sow in drills twelve inches apart and thin to such a distance in the row as to prevent crowding. A good dressing of nitrate of soda will stimulate the growth and insure tender, brittle roots. Successional sowings from one week to ten days apart will keep up a supply. After the hot weather of summer begins, it is better to sow the summer and winter varieties, as they do not become tough and stringy nor pithy so quickly as the early sorts. Radishes are subject to root maggots, which make them useless for culinary purposes. We know of no certain remedy for the pests. We have found that the best preventive measures are, to avoid the use of rank manure and not to sow on ground where radishes, turnips or cabbages were grown the previous year. We have been very careful to secure the very best seed possible, and are certain that there is none sold under other names which is better than the varieties we offer. One ounce of seed is sufficient for 100 feet of drill; 10 to 12 pounds for an acre.

Non Plus Ultra, or Early Deep Scarlet Turnip, Forcing

This has as small a top and is as early as any variety in cultivation, making it one of the best for forcing. Roots fit for use may be had in three weeks or less from time of sowing. Roots small, globular, deep, rich red color; flesh white, crisp and tender when young. May be planted very closely, owing to its small tops.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 75c.

RADISH—Continued



EXTRA EARLY SCARLET TURNIP

Extra Early Scarlet Turnip ¶

A small, round, red, turnip-shaped radish, with a small top and very quick growth. A very early variety, deserving general cultivation on account of its rich color and crisp, tender flesh. Desirable for forcing or early outdoor planting.

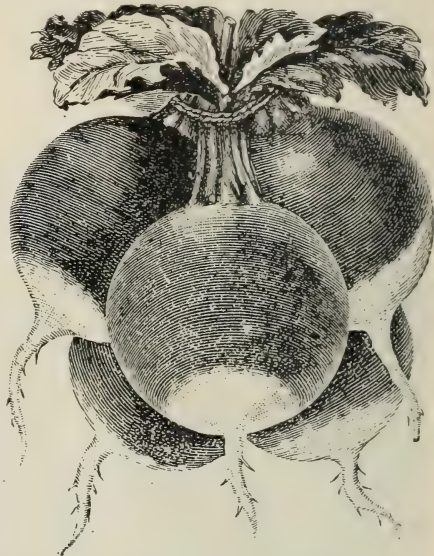
Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 50c.

Early Scarlet Turnip White Tipped

One of the handsomest of the turnip radishes and a great favorite in many large markets for early planting outdoors. Roots slightly flattened on the under side, color very deep scarlet with a white tip; flesh white and of the best quality. Cannot fail to give satisfaction.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 50c.

The above varieties of radishes are especially developed and selected for forcing. They should be grown quickly and used when small and tender, as they become pithy and flavorless when overgrown. Most of them are at their best when less than an inch in diameter.



EARLY SCARLET TURNIP.
(White Tipped.)



FRENCH BREAKFAST.

Long White Vienna, or Lady Finger

One of the finest of long white Radishes. Snow white, very brittle and crisp; of beautiful shape and rapid growth.

Pt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 60c.

French Breakfast ¶

A medium sized radish, olive shaped, small top, of quick growth, very crisp and tender, of a beautiful scarlet color, except near the tip, which is pure white. A splendid variety for the table on account of its excellent quality and its beautiful color.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 50c.



RADISH—Continued

Early Long Scarlet, Short Top ☞

This bright scarlet, small topped sort is about six inches long, grows half out of the ground, is uniformly straight, smooth, brittle and crisp and is an excellent sort for private gardens or market use.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.

Improved Chartier, or Shepherd

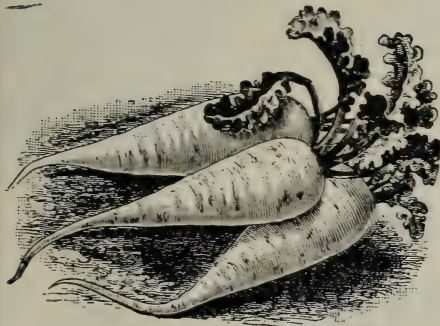
Although this American variety is too strong growing to be used for forcing, it is one of the very best for sowing outdoors. The roots come to usable size very early, remaining hard and crisp until they reach a diameter of one and one-half or two inches, and so furnish good roots for much longer time than any of the preceding varieties. Roots scarlet rose above, shading into white at the tip. They are long, cylindrical for the upper two-thirds, and then gradually taper to the tip. Flesh white, crisp and mild flavored.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.

White Strasburg Radish ☞

This grows to the largest size, and is usable when quite small, thus covering a long season. The mature roots are four to five inches long and about two inches thick, very white; the flesh is exceedingly crisp and tender. One of the best of the large summer sorts.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.



WHITE STRASBURG.

Winter Radishes

Sow about the same time as winter turnips, on light, rich soil, in drills eighteen inches apart; give frequent cultivation, and thin two to six inches apart, according to size of the variety. For winter use pull before severe frost, and store in damp sand in cellar.

Chinese Rose, or Scarlet China

Roots cylindrical, or largest at the bottom, tapering abruptly to a small tip. Skin very smooth and of a bright rose color, flesh firm, crisp, tender and quite pungent.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.

New White Chinese, or Celestial ☞

Is the finest of all extra large white radishes; the roots grow to immense size, averaging, in rich soil, from twelve to fifteen inches in length and fully five inches in diameter; nearly the whole of the large roots grow above the surface, but are shaded from the sun by the abundant foliage, so that the skin remains a pure paper-white; and, notwithstanding the immense size, the flesh is always crisp, mild and juicy.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 60c.



RHUBARB, OR PIE PLANT

Rhubarb, familiarly known as Pie Plant or Wine Plant, is cultivated in gardens for its leaf stalks, which are used for pies and tarts. Immense quantities are now annually sold in the large markets. No private garden should be without it.

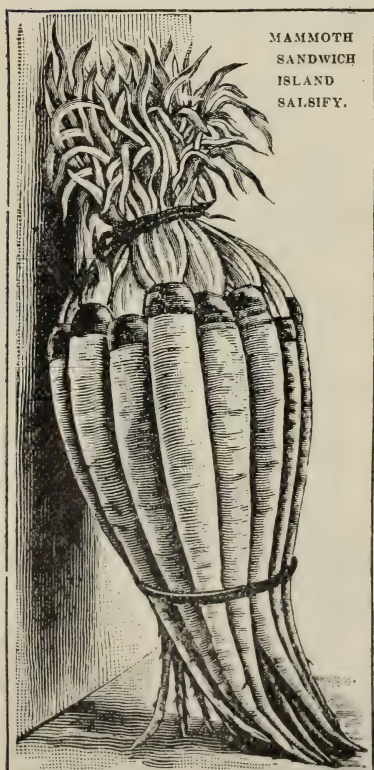
CULTURE.—Rhubarb succeeds best in deep, somewhat retentive soil. The richer its condition, and the deeper it is stirred the better. Sow in drills an inch deep, and thin out the plants to six inches apart. In the fall transplant the young plants into very highly manured and deeply stirred soil, setting them four to six feet apart each way, and give a dressing of coarse manure every spring. The stalks should not be plucked until the second year, and the plant never allowed to exhaust itself by running to seed.

MYATT'S VICTORIA.—The most popular variety.

Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.



MYATT'S VICTORIA.



MAMMOTH
SANDWICH
ISLAND
SALSIFY.

SALSIFY, OR VEGETABLE OYSTER

The long, white tapering root of Salsify resembles a small parsnip, and when cooked is a good substitute for oysters, having a very similar flavor.

CULTURE.—It succeeds best in a light, well enriched soil, which should be stirred to a good depth. Coarse and fresh manure should be avoided, as it will surely cause the roots to grow uneven and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnip. The roots are perfectly hardy, and may remain out all winter, but should be dug early in spring, as they deteriorate rapidly after growth commences. Store a quantity for winter use in a pit, or in a cellar in damp earth or sand.

Mammoth Sandwich Island

This grows **uniformly** to an extra large size, averaging **fully double** the size and weight of the old variety. The roots, notwithstanding their enormous size, are of very superior quality and delicate in flavor. It is such a decided improvement that we are quite sure that all market gardeners who once try it will use it exclusively.

Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

Remember, "PURITY SEEDS" are Unexcelled

SORREL



SORREL.

Those who think of Sorrel as the starved looking weed of barren lands have little idea of the possible value of the plant. The improved varieties when well grown and cooked like Spinage, make a healthful and very palatable dish. Sow in drills early in spring and thin the seedlings to six or eight inches apart in the row. One may commence cutting in about two months, and the plants will continue in full bearing from three to four years.

Large Leaved French

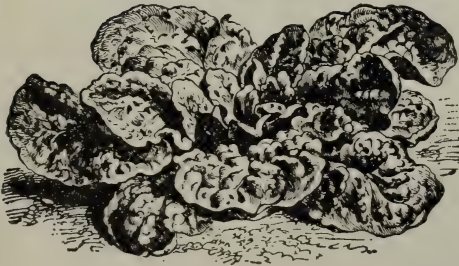
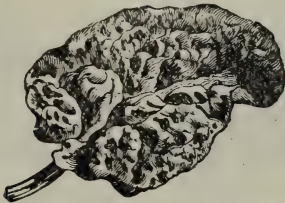
The best garden variety, having large, pale green leaves of fine quality.

Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

SPINAGE

Spinage is very hardy, extremely wholesome and palatable, and makes a delicious dish of greens, retaining its bright green color after cooking.

CULTURE.—Should be planted in very rich ground, the richer the better. Sow in drills one foot apart, and begin thinning out the plants when the leaves are an inch wide. All should be cut before the hot weather, or they will be tough and stringy. For early spring use, sow early in autumn and protect the plants with a light covering of leaves or straw.



Bloomsdale Savory Leaved

The earliest variety and one of the best to plant in autumn for early spring use. Plant of upright growth, with narrow pointed leaves, which are curled like those of cabbage. It grows quickly to a suitable size for use but soon runs to seed.

Pkt. 5c; oz. 10c; ¼ lb. 15c; lb. 35c.

Long Standing

An improved round seeded strain of excellent merit, having all the good qualities of other sorts and continuing in condition for use much longer. The leaves are smooth and very dark, rich green. Very popular with market gardeners.

Pkt. 5c; oz. 10c; ¼ lb. 15c; lb. 35c.

SQUASH

The Squash is one of the most nutritious and valuable of all our garden vegetables. Few farmers appreciate the value of winter squash as food for stock. We think an acre of squash, costing no more to cultivate, and much less to secure, will give as much available food for feeding stock as an acre of corn, and we strongly urge our readers to try a "patch" for this purpose.

CULTURE.—The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same as those given for cucumbers and melons, but Squash is less particular as to soil. The summer varieties should be planted four to six feet apart each way, and the winter sorts eight to ten. Three plants are sufficient for a hill. In gathering the winter sorts, care should be taken not to bruise or break the stem from the squash, as the slightest injury will increase the liability to decay.

Mammoth Summer Crookneck ¶

One of the best of the Summer Squashes. It is of dwarf, bushy habit and very productive. The skin is yellow. The flesh has a greenish yellow color, and is dry and of most agreeable flavor. This is in fact most highly esteemed of all the summer varieties. We particularly recommend our selected strain to the attention of market gardeners.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 70c.

Mammoth White Bush ¶

The fruit is a beautiful clear waxy-white instead of the yellowish-white so often seen in the old Early White Bush Scallop, and is superior to that variety in every respect. The best of the scalloped squashes.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 70c.



MAMMOTH WHITE BUSH.

Long White Marrow

OR IMPROVED VEGETABLE MARROW. One of the finest varieties for table purposes. Skin is very thin, color light yellow, salmon flesh. A good winter keeper.

Pkt. 5c; oz. 10c; ¼ lb. 25c; lb. 70c.

Fordhook

Bright yellow outside and straw yellow within. The flesh is dry and sweet—the best in quality of all winter squashes. It keeps in perfect condition until late in June. It is a strong and rapid grower—earlier in ripening than any other winter squash, and is immensely productive. A most valuable characteristic is that while such a remarkable keeper, the skin is so thin and delicate that the squashes are prepared for the table by cutting in half lengthwise and cooking, skin and all, at any time throughout the winter. Another feature is that the green squashes can be used at any stage of their growth.

Pkt. 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

Boston Marrow ¶

A fall and winter variety, very popular in the Boston market. Of oval form; skin thin, when ripe, bright orange mottled with light cream color; flesh rich salmon yellow, fine grained, and for sweetness and excellence unsurpassed, but not as dry as the Hubbard. We have an unusually good stock of this sort.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 60c.

Note.—When you order seeds to go by express, you to pay the transportation charges, 10 cts. may be deducted from the pound prices.

SQUASH—Continued

Hubbard

This is a superior variety and one of the best of winter squashes; flesh bright orange yellow, fine grained, very dry, sweet and rich flavored; keeps perfectly good throughout the winter; boils or bakes exceedingly dry and is esteemed by many to be as good baked as the sweet potato. Our stock is most carefully selected with regard to quality of the flesh and color and wartiness of the shell, but the latter peculiarities are largely determined by the soils in which the squashes are raised. Our customers can plant this variety in perfect confidence that every fruit will be a pure Hubbard.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. 90c.



HUBBARD.

Golden Hubbard

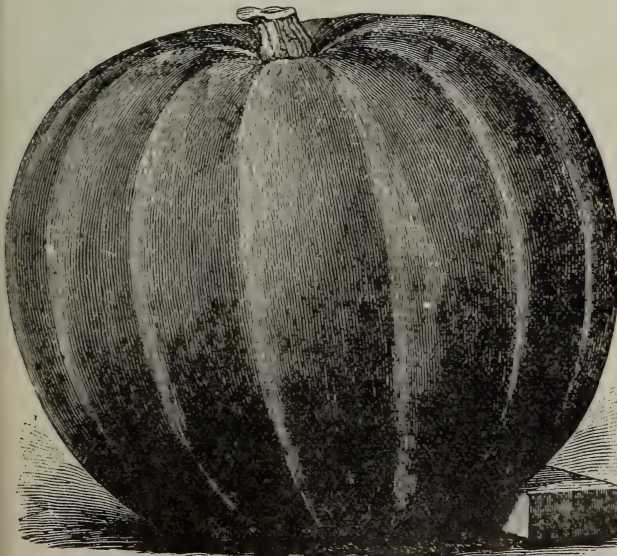
Productive. Early. Fine Quality. Good Appearance.

This is a True Hubbard Squash except in Color, which is Bright Red.

This vine is a vigorous but not rampant grower, and is wonderfully productive, expending the energy derived from liberal fertilizing in the production of an increased number rather than of overgrown and coarse fruits as some varieties are apt to do. It ripens its crop very early and uniformly, thus making it a certain cropper. The fruits are very uniform in size, weighing from six to eight pounds, and in shape are like the Hubbard. Though maturing early, they are wonderfully long keepers, so they can be held over in good condition for spring use. The shell is warty, hard and strong and a very beautiful orange red color except for a bit of olive green on the blossom end. The flesh is a deep orange and uniformly so to the rind, never having the green tinge so objectionable in the older sort. It cooks very dry, fine grained and good flavored.

We believe this is the best fall and winter sort yet produced and that it deserves to and will become a most popular variety. It certainly has no superior as a table squash.

Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 30c; lb. \$1.00.



Mammoth Chili

The outer skin of this great squash is rich orange yellow. The flesh is yellow and very thick, and the quality is good and nutritious. It is of highest value as a stock food, far exceeding ordinary pumpkins in this respect, and answering as well as root crops. It is a prolific variety, and keeps well throughout the winter. Has been known to reach the great weight of 292 pounds.

Pkt. 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.75.

TOBACCO

Tobacco is an Annual Plant, and although it grows to a greater size in the South, an equally good quality can be produced in the hot, dry summers of the North.

CULTURE.—The seed should be sown as early as possible after the danger of frost is over. A good plan is to burn a quantity of brush and rubbish, in the spring, on the ground intended for the seed bed, then dig and thoroughly pulverize the earth and mix with the ashes, after which the seed may be sown and covered very lightly. When the plants are about six inches high, transplant into rows four or five feet apart each way, and cultivate thoroughly with plow and hoe.

Connecticut Seed Leaf

Best adapted to the climate of the Middle and Northern States, as it is more hardy and endures the cold better than the tender varieties grown South. In many of the Northern States and in Canada this variety is the staple crop.

Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.

TOMATO

It is false economy to try to save on the first cost of Tomato Seed—a little seed goes so far. And yet the country is almost "flooded" with cheap Tomato Seed, saved without any regard to selection, and sometimes even the refuse of canning establishments. All our Tomato Seeds are grown from stocks raised strictly for seed purposes and from seed stocks carefully selected. We challenge comparison of our stock with any offered.

CULTURE.—Tomatoes do best on light, warm, not over rich soil, and success depends upon securing a rapid, vigorous and unchecked growth during the early part of the season. Sow in hot-beds from six to eight weeks before they can be set out of doors, which is when danger of frost is past; when the plants have four leaves transplant into shallow boxes or cold frames, setting them four or five inches apart; give plenty of air and endeavor to secure a vigorous, but steady and healthy growth, so that at the time of setting in the open ground they will be strong and stocky. Even a slight check while the plants are small will materially diminish their productiveness. Set out of doors as soon as danger from frost is over, but before doing so harden off the plants by gradually exposing them to the night air and by the withdrawal of water until the wood becomes hard and the leaves thick and of a dark green color. Transplant carefully and cultivate well as long as the vines will permit. The fruit is improved in quality if the vines are tied to a trellis or to stakes.

Atlantic Prize

The fault of the distinctively early Tomatoes was that they have been lacking in size and symmetry. This is all changed now, and instead of the small, rough, deeply corrugated fruits of the "Hundred Day" type, we have in the Atlantic Prize a variety bearing fruit which, in size, shape, color, solidity and quality, will compare favorably with the later kinds, and by repeated trials we have demonstrated that it ripens up a larger proportion of its crop the earliest of any variety. We do not hesitate to pronounce it the largest, smoothest, best flavored and brightest colored red, extra early tomato. Vine small, with few leaves, very hardy, bearing the fruit low down to the stem and in enormous clusters, which ripen all together. Where earliness is the chief consideration this is the best variety.

Pkt. 5c; oz. 20c; $\frac{1}{4}$ lb. 60c; lb. \$2.00.



ATLANTIC PRIZE.

Sparks' Earliana

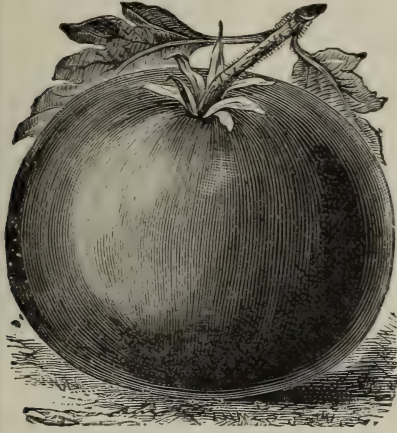
The Earliest and Best Large Smooth Red Tomato

Our experience with this new and most valuable variety during the past seasons confirms all that has been claimed for it. Market gardeners in this vicinity are enthusiastic in its praise, and grow it for early market in preference to any other variety. It is a full week ahead of all others. The plant is of strong and vigorous growth, setting its fruits freely and in great abundance. The fruit is not only remarkable for its earliness, but for its large size, perfect form, bright red color and delicious flavor. It ripens clear to the stem and does not crack. Its solidity and fine quality are quite equal to the best medium and late sorts.

Pkt. 10c; oz. 40c; $\frac{1}{4}$ lb. \$1.50; lb. \$2.50.

TOMATOES—Continued.

Acme ☞



ACME.
Beauty

The Smoothest and Best of all Main-Crop Purple-Colored Tomatoes.

It is one of the largest tomatoes grown, and is most regular in shape and size. Color purplish-red, very solid, firm flesh, a good keeper, and not subject to rot or crack on the vines. It is an excellent shipper, ripens evenly to the stem, is a strong, healthy grower, not subject to rust or blight, is an enormous cropper, and produces until the vines are killed by frost, holding its size exceedingly well until the last picking. The quality is of the very best, and for cooking and slicing purposes it cannot be excelled. It is in every way a most desirable variety for market gardeners, as well as the home gardener.

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

One of the smoothest and most uniform in size, and earliest of the purple fruited sorts. Vine large, hardy and productive, ripening its fruit almost as early as any, and continuing to bear abundantly until cut off by frost. Fruit in clusters of four or five, invariably round, smooth and of good size, free from cracks, and stands shipment remarkably well, flesh solid and of excellent flavor.

For market gardeners who want an early, purple fruited tomato, either for home market or to ship; for private gardens or for canners, it stands without a peer among its class.

This variety is used for planting under glass.

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.



Dwarf Champion

This is a purple fruited variety, which forms very stout, strong plants about two feet high. The branches are short, making a bushy plant that stands quite erect without stakes. This sort is often sold as "Tree Tomato." Fruit smooth, medium sized, color purplish-pink, fairly solid, but has no hard core, and is of good flavor. About as early as any purple fruited tomato, and is quite popular in some localities, both for market and home use. The dwarf habit of the vines makes it very desirable for forcing, as it can be planted closer to the glass, and more closely on the bench, than the tall growing kinds. Our stock is a very superior strain, with larger, smoother fruit than the original.

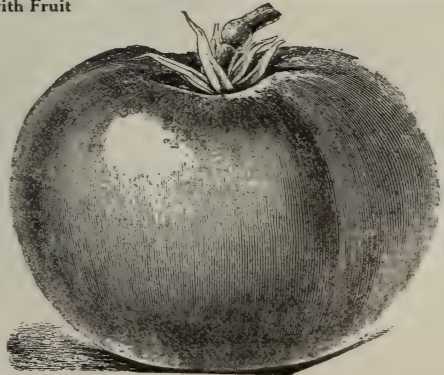
Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.

"Dwarf Stone" Tomato

This is the Largest Fruited of all the Dwarf or "Bush" Tomatoes. The growth is erect until the branches become overloaded with Fruit

Foliage heavy and a rich dark green. The growth is similar to that of Dwarf Champion, and while later, the fruits average a third larger. The plants are quite hardy and the blossoms set freely even in a cool, wet season. The fruits are produced in clusters of three to five, and as the growth is close-jointed, each plant produces a large number. The first tomatoes are, of course, the largest, and average four inches in diameter and two and a half inches in depth from stem to blossom end. Even the late settings of fruits are considerably larger, however, than those of other dwarf varieties, and retain the deep ball-like form. They are bright scarlet in color, very smooth and regular, exceptionally firm and solid; the walls of flesh are thick, and the fruits have a solid, meaty center, with no hard core. The quality is of the finest, the flesh being sweet even in cool weather late in the season.

Pkt. 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.00.



TOMATOES—Continued

Perfection

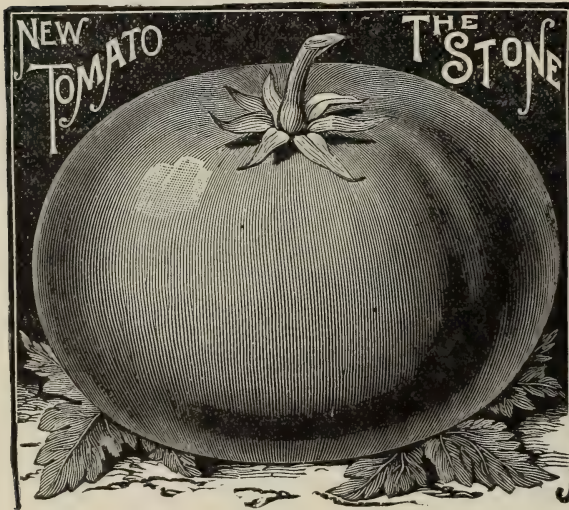
This is one of the handsomest tomatoes grown, and all who have tried its invariably round, smooth, handsome red fruit, pronounce it of the highest quality. It has been used satisfactorily for forcing under glass.

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

The Matchless

This great Tomato is well named. The color is a rich, cardinal red. The skin is so tough that it is a splendid shipper and keeper and is less liable to crack in wet weather than any other large tomato. Unsurpassed for market or for table. The plant is a strong grower, and is very productive, bearing with undiminished vigor until frost. The fruit is free from core, and the seed spaces are comparatively small. The leaves are of a rich, dark green color, and very luxuriant, indicating great constitutional vigor, and giving the plant ability to produce fruit of the largest size throughout the entire season. It stands at the front as a large, bright red, main crop sort.

Pkt. 5c; oz. 40c; ¼ lb. \$1.25; lb. \$4.00.



Stone

This is the heaviest and most solid fruited of the large tomatoes of good quality.

Vines vigorous and productive.

Our stock is distinctly Superior to most of that offered under this name, being More Uniform, Better Colored and Larger.

Fruit round, apple shaped, very large, very deep red in color, and astonishingly heavy. Canners use this variety almost exclusively.

Pkt. 5c; oz. 20c; ¼ lb. 60c; lb. \$2.00.

Red Pear Shaped

Used for preserves and to make "tomato figs." Fruit bright red, distinctly pear shaped, and with a peculiar flavor. Our stock is the true pear shaped, and not the larger red plum tomato which is so often sold under this name.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.



RED PEAR SHAPED.

Yellow Pear

Fruit pear shaped, clear, deep yellow color; flesh yellow and fine flavored. Much esteemed for preserves.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.



RED CHERRY.

Red Cherry

Fruit small, about five-eighths of an inch in diameter; perfectly round and smooth. Fine for pickles and preserves.

Pkt. 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.

TURNIP

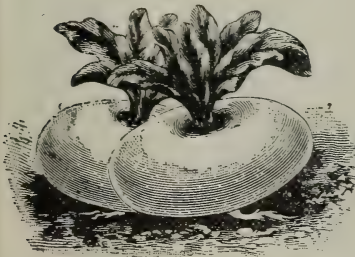
For feeding stock in fall and winter, there is nothing superior to Turnips and Ruta Bagas, as they will yield a larger amount of food than almost anything else on the same space of ground. We cannot too earnestly recommend farmers to increase their sowings largely, for we are sure no crop will prove more remunerative.

This wholesome and agreeable vegetable is most easily affected in its form and flavor by soil, climate and mode of culture. There are a great many varieties, but our list comprises the best for the garden or farm.

Sow in drills about sixteen inches apart, and half an inch deep, or sow broadcast, but in either case be sure to have the ground rich and freshly dug. Be careful to weed and thin out, so the young plants will not be checked and injured. Any overcrowding will result in rough and poorly flavored fruit. It is important to get the spring and summer crops started very early so that the turnips may have time to grow to sufficient size before hot weather causes them to become tough and strong.

In the Middle and Western States sow for fall and main crop from the middle of July to the last of August, as directed for the spring sowing. In the field turnips are generally sown broadcast, though much larger crops are obtained by drill culture.

To preserve turnips in good order for winter, store in a cool cellar and cover with sand or turf to keep them fresh. Another method is to put them in a pit dug in dry soil where there will be no danger of water standing, and to cover with straw overlaid with earth sufficiently deep to keep out frost. Thus protected, turnips will keep well till spring.



Extra Early White Milan

This variety is remarkably early. The top is very small, upright and compact, so that the rows can be planted close together. The clear white roots are very smooth, symmetrical and beautiful. The flesh is white, tender and sweet.

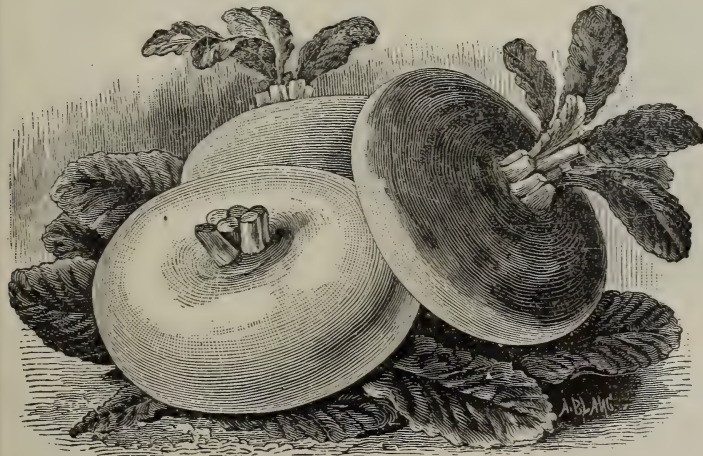
Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

EXTRA EARLY WHITE MILAN.

Early White Flat Dutch

A most excellent garden variety, and largely used in the Southern States. Root medium size, flat; color white; very clear, sweet and tender. It is desirable for table use, but is spongy and inferior when overgrown.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.



Early Red or Early Purple-Top Strap-Leaved

This is an early variety and a great favorite for table use; form flat, like a broad disc, and of medium size; color purple or dark red above ground, white below; flesh white, fine grained and tender; leaves few, upright in growth.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.

EARLY WHITE FLAT DUTCH AND EARLY RED OR PURPLE TOP.

TURNIPS—Continued



WHITE EGG.

Red or Purple Top White Globe

A variety that originated from the Purple-Top Flat Turnip. It is globular and nearly as large as the Pomeranean White Globe, of beautiful appearance, of most excellent quality, and equally desirable for table or stock. It keeps well and is a fine market sort.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.



RED, OR PURPLE-TOP WHITE GLOBE.



POMERANEAN WHITE GLOBE.

Pomeranean White Globe

This is one of the most productive kinds, and in good, rich soil roots will frequently grow to twelve pounds in weight. It is perfect globe shape; skin white and smooth; leaves large and dark green.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.

Orange Jelly, or Robertson's Golden Ball

This is the most distinct yellow Turnip ever offered. It is of very fine texture, and the best, sweetest and most delicious of the yellow-fleshed varieties. It is of medium size, with small tap-root, a rapid grower, matures early and keeps well. A superior table variety.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.

TURNIPS—Continued

Ruta Bagas, or Swedes



AMERICAN PURPLE TOP, OR IMPROVED
LONG ISLAND.

**American Purple Top, or Improved
Long Island** ¶

This is a strain of Purple Top Yellow Ruta Baga of American origin, selected to a smaller top and much shorter neck than is usually found, while the roots grow to a large size and are of the finest quality. We consider this one of the most desirable kinds on our list.

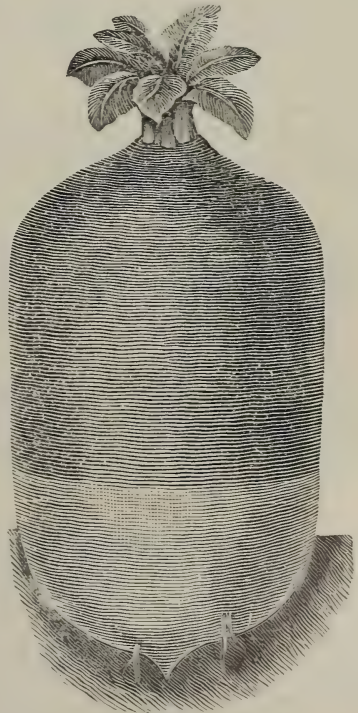
Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.

Monarch, or Tankard

This is a yellow-fleshed sort, having very large tankard shaped roots, with relatively small necks and tops. Color purplish-crimson above ground, yellow below; flesh very solid; fine grained and of the best flavor. This very popular variety is also sold as Hurst's Monarch, and Carter's Elephant.

Pkt. 5c; oz. 10c; ¼ lb. 20c; lb. 50c.

CULTURE OF RUTA BAGA
—Sow the seed about a month earlier than the preceding varieties of turnips. Ruta Bagas should be sown on ground enriched with well rotted manure, in drills two and one-half feet apart, and should be thinned to six to eight inches apart in the row. Keep the weeds thoroughly in check with the hoe or cultivator, and when the roots have grown full size, and before hard freezing weather, pull them, cut off the tops and store in a root cellar or pit. Ruta Bagas are sometimes sown broadcast, and left to take their chances with the weeds and bugs, but this method is only successful on new clearing in which there is no weed seed.



Aromatic, Medicinal, and Pot Herbs

GENERAL CULTURAL DIRECTIONS

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

Anise

(*Pimpinella anisum*.) A well-known annual herb whose seeds, which have an agreeable aromatic odor and taste, are used for dyspepsia and colic, and as a corrective of griping and unpleasant medicines. Sow early and thin to three inches apart in a row.

Pkt. 5c; oz. 10c.

Caraway

(*Carum carui*.) Cultivated for its seed, which are used in confectionery, cakes, etc. The leaves are sometimes used in soups. If sown early in August the plants will give a fair crop of seed the next season, but when sown in the spring will not seed until the next year. Plant in drills two or three feet apart, and thin to six inches apart in the row.

Pkt. 5c; oz. 10c.

Dill

(*Anethum graveolens*.) An annual cultivated for its seed which has an aromatic odor, and a warm, pungent taste. It is good for flatulence and colic in infants. It is sometimes added to pickled cucumbers to heighten the flavor. Sow early in spring, and keep clear of weeds.

Pkt. 5c; oz. 10c.

Marjoram, Sweet

(*Origanum marjorana*.) A perennial plant, but not hardy enough to endure the winter of the North. The young tender tops are used green for flavoring, or they may be dried for winter use. Sow in drills as early as possible, and thin out the plants to ten inches apart.

Pkt. 5c; oz. 20c.

Rue

(*Ruta graveolens*.) A hardy perennial with a peculiar smell. The leaves are bitter, and so acrid as to blister the skin. It is a stimulant and anti-spasmodic, but must be used with great caution, as its use sometimes results in serious injury. It must not be suffered to run to seed and does best on poor soil.

Pkt. 5c; oz. 15c.

Sage

(*Salvi officinalis*.) A hardy perennial possessing some medicinal properties, but cultivated principally for use as a condiment, it being used more extensively for flavoring and dressing. Sow early in spring (four or five pounds to acre in drills) on very rich ground, cultivate often and thin the plants to sixteen inches apart. Cut the leaves and tender shoots just as the plant is coming into flower, and dry quickly in the shade. The plants will survive the winter and may be divided. If this is done they will give a second crop superior in quality.

Pkt. 5c; oz. 20c.

Savory, Summer

(*Satureia hortensis*.) A hardy annual, the dried stems, leaves and flowers of which are extensively used for flavoring, particularly in dressing soups. Culture the same as that of sweet Marjoram.

Pkt. 5c; oz. 20c.

Thyme

(*Thymus vulgaris*.) This herb is perennial, and is both a medicinal and culinary plant. The young leaves and tops are used for soups, dressing and sauce; a tea is made from the leaves which is a great remedy in nervous headache. Sow as early as the ground will permit.

Pkt. 5c; oz. 20c.

A Descriptive List of Choice Flower Seeds

The pleasure resulting from a large and varied collection of flowers
will amply repay for time and labor spent

To have a beautiful flower garden, one must take pleasure in working and caring for the plants when young. It has ceased to be a necessity to keep such large stocks of bedding and other tender plants under glass through the winter, thereby saving the expense of glass, fuel, labor, etc. We are enabled to send out the highest results of carefully selected seed, in cheap paper packets, from which the amateur will derive his plants by means so simple as to be within the reach of everyone.

Nothing is more beautiful than the old-time and natural flowers. Do not cast aside the single Petunias, Hollyhocks, Fox-gloves, Forget-Me-Nots, and the old-time Phlox and Paeonies, for nothing is handsomer than the old-fashioned flowers. Were we to assist nature more, rather than try to create monstrosities, our garden would look by far more beautiful and natural.

The soil best adapted to most flowering plants is a light, moderately rich loam, containing a sufficient amount of sand to make it friable. A great many varieties will live in almost any soil, but to give them a fair chance to develop, some care should be taken to make it suited to their needs. Many flowers are better if produced on plants of vigorous growth; hence a portion of the garden should be prepared by deep digging, thorough pulverization and liberal enriching with large quantities of well rotted manure. Since other varieties produce the largest and finest colored flowers when grown on rather light, poor soil, a portion of the garden should not be enriched.

Cultural directions are given on nearly all packets, and we urge purchasers to study them carefully. While some seeds need special treatment, the following general rules will apply to all: Make the surface as fine and smooth as possible; do not plant any seed when the ground is wet; cover each lot of seeds to a uniform depth, which should never be more than three or four times the diameter of the seed; press the soil firmly over the seeds; plant in rows so that the young plants can be easily seen and pull up all weeds as soon as they appear.

The term "Annual" is given to those plants which grow, flower, seed and die within the same year.

"Biennials" are those plants that do not generally flower until the second season, and after blooming die.

"Perennials" are those that do not generally flower until the second year, but continue to bloom for years and may be propagated by a division of the roots.

Acroclinium

(**Everlasting.**) Very pretty, half-hardy annual, producing white and rose colored daisy-like flowers in August and September. These are the "Immortelles," so desirable for wreaths and winter bouquets. Height one foot. **Mixed pkt. 5c.**

Ageratum

The different varieties of Ageratum grow from six inches to two feet or more in height and are very profuse and constant bloomers. They bear clusters of round tassel-shaped blossoms, which are excellent for cut flowers and in borders. Hardy annual. **Mixed pkt. 5c.**



ALYSSUM.

Alyssum, Little Gem

(**Benthani Compactum.**) A beautiful white variety of Sweet Alyssum especially adapted to edgings, borders and rock work. The plants grow about six inches high, and produce hundreds of flowers, which form a compact mass of bloom about fifteen to eighteen inches in diameter. Hardy annual. **Pkt. 5c.**

ANTIRRHINUM.—See Snapdragon.

ASTERS

It is unnecessary to dwell on the great beauty of these popular favorites, as they are appreciated by everyone. Our seed is the very finest it is possible to procure. We recommend our friends to plant a number of varieties, as no other annuals give so magnificent a display during the late summer and fall months.

Truffaut's Perfection Paony Flowered

This magnificent race must be seen in order to get any adequate idea of the possibilities in aster culture. The plants form large compact bushes about eighteen inches high, which, in the full flowering season, are literally covered with large, extremely double, perfectly shaped flowers. While each class of asters has a beauty and individuality of its own, and it is better to sow seed of many of them, yet if we were confined to a narrow range of choice and could sow but one class, we would choose Truffaut's. We offer seed of the most distinct and desirable colors. **Mixed, pkt. 10c.**



COMET ASTERS.

Comet Asters

This is the most distinct and improved type of flowers in Asters as well as of the earliest period of bloom. Under good cultivation plants grow twelve to fifteen inches in height, branching freely, and each stem terminates in a fine large flower two to two and a half inches in diameter. The outer petals are broad, flat, and reflexed or curving outward, while the center of the flower is composed of many short tubular petals, slightly pointed. The whole flower has a distinctly feathery effect, greatly resembling that of the fine Japanese *Chrysanthemums*.

GIANT COMET — "BRANCHING WHITE." — This is similar in growth to *Victory*, described below, but has flowers of even larger size and of the purest white; of fine, regular form, well reflexed, full centered, and highly desirable for cut flowers.

Pkt. 10c; 3 pkts. for 25c.

NEW GIANT BRANCHING COMET, "FREEDOM." The same fine habit and enormous flower as in *Branching White Comet* and in *Victory*, but distinct in having the large bright carmine petals finely striped with silver white.

Pkt. 10c.

NEW GIANT BRANCHING COMET, "VICTORY." The plants are of very strong growth, two feet in height, freely branching, producing large bright crimson flowers of the true Comet type on long, stiff stems. The double flowers are of beautiful soft shade of clear carmine or rose-pink.

Pkt. 10c; 3 pkts. for 25c.

ASTERS—Continued

NEW GIANT COMET ASTERS, Mixed. This new strain equals in feathery form and fine coloring the original Comet Asters, but the plants are of stronger growth, producing flowers of larger size and on longer stems. With good cultivation, flowers of this type frequently measure four inches across, and in their fine form, large size and long stem, approach in beauty the fine Chrysanthemums grown in the greenhouse during the late fall months. This special mixture contains seed of **New Giant-branching White, Freedom, and Victory.** Pkt. 10c; 3 pkts. for 25c.

SEMPLER'S NEW BRANCHING ASTERS. All Colors Mixed of this favorite long-stemmed strain for cutting. Pkt. 5c.

BACHELOR'S BUTTON.—See *Centaurea*.

Balsam

Balsams have been so much improved by cultivation that with good seed and proper care, a **single** flower is the exception, each blossom being fully as double as a rose. The colors range from white to dark blood red, yellowish and spotted. Balsams are tender and should be started in boxes indoors or the open ground when danger of frost is past. The seeds are large and germinate quickly. The plants prefer a rich, sandy loam and must not suffer for moisture. Better results are obtained when only a few main branches are allowed to grow, all the secondary and weak ones being pinched out. Well grown plants should stand two feet apart each way. Hardy annual, one to two feet high.

DOUBLE CAMELLIA, extra fine mixed, as double as a Camellia, which it resembles; white, blotched with various colors. Pkt. 5c.

BELLIS—See *Daisy*.

Calliopsis

(*Coreopsis*.)

A very showy border plant, producing flowers of brilliant yellow, orange, crimson, red and brown, beautifully contrasted. Hardy annual; two feet high. Fine mixed, pkt. 5c.



BALSAM.

Canary Bird Flower

(*Tropaeolum Canariense*.)

A beautiful climber. The curiously shaped and charming little canary-colored blossoms bear some resemblance to a bird with its wings half extended. The plant has a luxuriant growth and rambling character. If planted by the side of an arbor or trellis, it will run twenty feet, and blossom from July till frost comes. Tender annual. Pkt. 10c.



CALLIOPSIS.

CALENDULA—See *Marigold*.

CALIFORNIA POPPY.—See *Eschscholtzia*.



CANDYTUFT.

FINEST LARGE FLOWERING VARIETIES.—Nothing can exceed the beauty and variety of color of these magnificent bedding or greenhouse plants. Start the seed in heat in February; the plants will bloom by August in the greatest profusion. About three feet high. **Fine mixed, pkt. 16c.**

Candytuft

ROCKET (Empress.) White, extra large trusses. A great improvement in the size and quality of the flowering trusses over the common white variety.

Pkt. 5c; fine mixed, pkt. 5c.

Canna

Stately ornamental plants, very desirable for bedding outdoors, where they produce clusters of large flowers of the most intense and brilliant colors. Tender perennial; two to six feet high. Store roots in cellar in winter.

Canterbury Bell

(Campanula Medium.) Handsome, hardy biennial, of stately growth, rich color and profuse bloom. Succeeds best in light, rich soil, and should be transplanted two feet apart. Has large bell-shaped flowers which are strikingly effective.

Double mixed, pkt. 10c.

Carnation

(Dianthus Caryophyllus.) Carnations are an indispensable feature in every collection of house or conservatory plants. Their wide range of color, perfectly shaped and highly perfumed flowers and long stems class them among the very best for cut flowers, etc. The plants may be set in the open ground during the summer, where they will flower as profusely as when grown in pots in the house. Half hardy perennials; one to one and one-half feet high.

CARNATION, MARGUERITE. This flower is, in some of its habits, a decided improvement over all known forms of its species. Seed of this variety will give good flowering plants in four to five months, while the old kinds require at least a year. The flowers are large, double, very fragrant and borne in great abundance. This is an early, continuous bloomer, and gives a great variety of colors. Height about fifteen inches.

Marguerite, Giants of California, mixed, pkt. 10c.



CARNATION, MARGUERITE.

Castor Bean

(Ricinus.) ZANZIBARIENSIS. A comparatively new species of wonderfully vigorous growth. The plants grow from ten to fifteen feet high. The leaves have a brilliant lustre, measure about thirty inches across, and in different plants range from bright green with green stems to deep bronze with dark red stems. We know of no annual plants so desirable for concealing unsightly objects or of more imposing beauty when standing alone on the lawn. Of very quick growth in rich soil. Tender annual.

Mixed varieties, pkt. 5c.

CELOSIA CRISTATA—See Cockscomb.

Centaurea

CYANUS (Bachelor's Button, Corn Flower)



BACHELOR'S BUTTON.

This is the flower seen in such great abundance in the fields of Europe, and to a less extent in this country, and though a weed **there**, in its improved form it is one of the most attractive of garden flowers. If seed is sown as soon as the ground is fit in the spring and the flowers picked so as to prevent the plant exhausting itself by seeding, they will furnish a profusion of bright blue, white or pink flowers from July till late in autumn. One to two feet high.

Double mixed, all colors, pkt. 5c.

CENTAUREA IMPERALIS

The plants grow three feet in height, with numerous large flowers borne on long stems, in shades of color ranging through white, lilac, rose-pink, and purple. Individual flowers are also beautifully shaded, while the petals are finely fringed, giving a soft, feathery effect. They are produced in great profusion.

Finest mixed, all varieties, pkt. 10c.

CHEIRANTHUS CHEIRI—See Wall Flower.

Chrysanthemum

Chrysanthemums have deservedly become very popular. They are showy and effective in the garden, and very desirable for cut flowers.

Mixed, Carinatum and Coronarium varieties, pkt. 5c.

(The Carinatum and Coronarium varieties are hardy annuals one and one-half to two feet high, and are most desirable for the garden. The others are the taller and later blooming sorts so largely used by florists.)

Superb mixed double perennials, seed from finest Chinese and Japanese varieties, pkt. 25c.

Cosmos

A very effective autumn flowering plant. Quite hardy and rapid growing, forming bush-like plants four to eight feet high and covered with large, single, dahlia-like flowers. Should be started in this latitude in March and transplanted to open ground about June 1st.

HYBRIDA, Giants of California. This variety produces a profusion of large flowers, which being gracefully poised on long stems are extremely useful for decorative purposes. Mixed, pkt. 5c.

New Early Blooming COSMOS. This beautiful new strain produces abundantly well-formed, lovely flowers of large size; pure white, pink and crimson in color. It can be had in bloom from July to November and grows freely everywhere. Pkt. 5c.

CONVOLVULUS MAJOR—See Morning Glory.

COREOPSIS — See Calliopsis.

CUCURBITA — See Gourds.



COSMOS.

Cockscomb

(*Celosia Cristata.*) Highly ornamental plants, producing crested heads of flowers, somewhat resembling a cock's comb. They are of all shapes and colors, but of all colors the rose and crimson are the most brilliant and rich. Tender annual. The dwarf varieties are about one foot high.

Dwarf mixed, pkt. 5c.

Columbine

(*Aquilegia.*) Every well regulated lawn has a space devoted to hardy perennials, and no bed of perennials would be complete without a due proportion of Columbines. They are of the easiest culture, and when once established will furnish for many years a magnificent display of the handsome flowers each spring and summer. The beds should be kept clear of weeds and given each year a liberal dressing of well rotted manure. Hardy herbaceous perennials; two to three feet high.

Mixed double, best and finest colors, pkt. 5c.



CYPRESS VINE.

Cypress Vine

(*Ipomoea Quamoclit.*) A most beautiful climber, with delicate, dark green, feathery foliage, and an abundance of bright star-shaped, rose, scarlet or white blossoms, which contrast most beautifully with the graceful foliage. Tender annual; about fifteen feet high. **Mixed, pkt. 5c.**

Dahlia

Both the single and double strains of this magnificent race of plants may be had in the greatest variety and beauty from seed. If planted early and forced they can be made to flower the first season. Tender herbaceous perennials.

Finest double, mixed, pkt. 10c.

Daisy

(*Bellis.*) The Daisy has been so far improved by selection and careful cultivation that **good seed** will give at least eighty per cent. of double flowers. These are as large and double as any of the named sorts that are propagated by division of the roots and are sold at a high price. The plants bloom well in the house and are splendid for early spring and summer flowering when planted in a slightly shaded situation.

Double mixed, pkt. 10c.

DELPHINUM—See Larkspur.

DIANTHUS—See Pink.

DIANTHUS BABBATUS—See Sweet William.

DIANTHUS CARYOPHYLLUS—See Carnation.

Eschscholtzia

(*California Poppy.*) A genus of the Poppy family, and fully as valuable as the common Poppy for garden ornamentation, and as easily grown. Nothing is handsomer or richer in color than a bed of these in full bloom. Hardy annuals; height one foot.

Mixed, pkt. 5c.



DAISY.

Four O'Clock

(**Marvel of Peru.**) The plants are large and each needs three or four feet of space each way for its best development. The flowers are funnel-shaped, white, red and striped, and open about four o'clock in the afternoon, remain open all night, and generally perish before noon the next day. The French call it **Belle de Nuit**, "Beauty of Night." Will grow in any common garden soil. Sow seed in open ground. Hardy annual; two feet high. **Mixed, pkt. 5c.**

Forget-Me-Not

(**Myosotis.**) The Forget-Me-Not is an old favorite, bearing clusters of star-shaped flowers. It thrives well in shade or open border. Hardy perennial.

ALPESTRIS. Plant of compact, bushy habit, growing six to eight inches high; flowers, large, blue. **Pkt. 5c.**

Foxglove

(**Digitalis.**) Plants grow to a height of three or four feet and produce dense spikes of brilliantly colored flowers. A valuable flower in every perennial garden; does not usually blossom until the second year. Hardy biennials or perennials. **Splendid mixed, pkt. 5c.**



Gourds



GOURDS.

(**Cucurbita.**) A tribe of climbers with curiously shaped and colored fruit. Being of rapid growth, they are fine to cover old fences, trellises, stumps, etc. Tender annual; to twenty feet high.

Mixed pkt. 5c.

Heliotrope

Highly valued for the fragrance of their flowers and duration of bloom. Half hardy perennial, blooming the first year from seed; one foot high.

Dark varieties mixed, very choice, pkt. 10c.
HELIANTHUS—See Sunflower.

Hollyhock

The Hollyhock, in its present state of perfection, is very unlike its parent of olden time; it now ranks with the Dahlia, Aster, Camelia, etc., being exceedingly rich and varied in color, and as double as a rose. For a background to a flower garden, perhaps no plant is so useful. Hardy perennial; five feet high; Chater's finest mixed, double varieties of the greatest perfection.

Pkt. 15c.

IBERIS—See Candytuft.

INDIAN SHOT—See Canna.

IPOMOEA, IMPERIAL JAPANESE—See Morning Glory.

IPOMOEA, QUAMOCLIT—See Cypress Vine.

Larkspur

Delphinium. The Larkspur is one of the handsomest and most useful of plants, and for large gardens is invaluable.

DOUBLE DWARF ROCKET. Hardy annual; ten inches high. **Mixed Pkt. 5c.**

TALL STOCK FLOWERED Consolida fl. pl. Spikes of double flowers eighteen inches long. Hardy annual; two feet high. **Mixed Pkt. 5c.**



HOLLYHOCK.

Lobelia

A most elegant and useful genus of plants of easy culture and well adapted for bedding, edgings, pots or rockeries. They make a neat edging for beds of white flowers and are very effective in masses, being always completely covered with flowers.

Mixed. pkt. 5c.

LATHYRUS LATIFOLIUS—See **Perennial Peas.**

LATHYRUS ODORATUS—See **Sweet Peas.**

Marigold

Whenever a rich and continuous display of bloom is desired, the Marigold is almost indispensable. The African varieties are tall, growing usually two feet or more, while the French are more dwarf. All are desirable. Hardy annuals; in bloom till frost comes.

AFRICAN, Double mixed, pkt. 5c.

FRENCH, Double Dwarf, mixed, pkt. 5c.

MATHIOLA—See **Stocks.**

MARVEL OF PERU—See **Four O'clock.**

Mignonette

A well-known hardy annual producing dense, semi-globular spikes of exceedingly fragrant flowers. It is so fragrant that the whole atmosphere around is perfumed. If sown at intervals in spring and early summer, it will bloom till killed by frost. Seed sown in autumn will bloom early in spring. Hardy annual; one foot high.

RESEDA ODORATA GRANDIFLORA. Large flowered sweet Mignonette.

Pkt. 5c.

IMPROVED GOLDEN QUEEN. Large flower, spikes are densely set with florets of a light golden yellow; deliciously fragrant.

Pkt. 5c.



MIGNONETTE.

Moon Flower



MOON FLOWER.

(Ipomoea Grandiflora Alba.) This is one of the most vigorous of all the summer climbers. Will grow thirty to forty feet in a single season, and will be covered with its large, white flowers every evening and cloudy day. The hard outer coat of the seed should be cut through with a sharp knife and the seed planted in a warm place. If the soil be kept moist, germination will take place in ten days to two weeks. After the plants are up tend carefully and plant out when danger from frost is past. Rich soil tends to make the plant run to vines and leaves, while poor earth will produce earlier and more abundant flowers. This variety is also known as **Ipomoea Notiflora.** **Pkt. 10c.**

Morning Glory

(Convolvulus Major.) A handsome, showy climber, of easy culture, suitable for covering arbors, windows, trellises, old stumps, etc. It is so perfectly hardy as to grow in almost any soil. Hardy annual; ten feet high.

Mixed pkt. 5c.



MORNING GLORY.



GIANT JAPANESE MORNING GLORY.

Giant Japanese Morning Glory

This plant has been developed to such a state of perfection that it now produces flowers of immense size and almost endless variety of color and markings. Some of the flowers are brilliant red, or rich blue; others are equally brilliant with broad margins of clear white. Some blossoms are striped and dotted with blue or red on white or lemon yellow ground, others clouded with blue and red; in fact, one may expect to find some new and exquisitely beautiful markings every morning. Not only are the flowers varied but the foliage is equally so: some of it comes plain green, and part is mottled with white and shades of yellow or yellowish green. The plants do not always produce flowers exactly like those from which the seed came, and often give different colored blossoms at different times, so we only offer seed in mixture. Our seed was saved from a collection of almost unlimited variety in color and marking of both foliage and flowers, and is the very best it is possible to produce. The seed is sometimes slow to germinate, but if a slight notch is cut in one end and the seed soaked a few hours in lukewarm water the plants will come up more quickly. Pkt. 5c.

Mourning Bride

(*Scabiosa*, or *Sweet Scabius*.) An improved stock which bears a profusion of flowers. These are larger and fuller than the old type, and their variety and brilliancy of color make them very desirable for cut flowers. Hardy annual; about one foot high.

Double Dwarf, mixed, pkt. 5c.

NASTURTIUMS

These most popular, free flowering, tender annuals are of two distinct types—the Tall, or running varieties, and the Tom Thumb, or dwarf varieties. Both are of easiest culture, growing and blooming in greatest profusion even in the poorest soils. The tall varieties are of strong, vigorous growth, throwing out running shoots which can be trained upon strings or wires, or can be readily made to climb the ordinary paling fences or wire netting. They are also extremely showy as trailing plants when set around borders of vases or ornamental boxes, on the lawn, and can be effectively planted at the top of a steep slope and allowed to run down the bank. They are equally beautiful simply trailing on level ground. The dwarf or “**Tom Thumb**” varieties, being of neat compact growth, can be planted as borders to flower-beds or along garden walks.

Seed should be planted thinly when trees are starting out in leaf. When well started, young plants should be transplanted or thinned out to stand six or more inches apart for tall running varieties, and ten or twelve inches for those of the dwarf, compact-growing sorts, as the latter grow in rounded bush form with quite dense foliage, and if grown too thickly in wet soil are apt to blight or rot off during hot summer months. Both types bloom with the greatest freedom, producing flowers of most brilliant and varied color. These are not only bright and showy on the plants, but last well when cut for house decorations. They blossom freely at a time when the supply of flowers is not very abundant in the garden. For winter blooming in the house, seeds of the climbing or running varieties should be planted singly in flower pots early in September. In planting, it is best in heavy soil to make a slight ridge for the seed, so that surplus moisture may drain away readily. Seed should be covered one inch or more in depth, and, if at all dry, the soil should be firmly pressed above the seed, so as to enter closely the corrugations.



NASTURTIUM, TALL.

Nasturtium, Dwarf

(*Tropaeolum Minor.*) A bed of dwarf nasturtiums in the yard is very brilliant and attractive, blooming all the season. Hardy annual; about one foot high.

Mixed dwarf, pkt. 5c.



NASTURTIUM, DWARF.

Nasturtium, Tall

(*Tropaeolum Lobbianum.*) The Lobbianum differs from the common running nasturtium, in being less rank growing, more floriferous, and having richer, more varied colored flowers of many shades, from the richest scarlet to very deep maroon. Fine for covering arbors, trellises and rustic work. Half hardy annual; about ten feet high.

Mixed Tall (Lobbianum varieties), pkt. 5c.

PANSY

Pansies, next to **Sweet Peas**, are the most popular of all flowers grown from seed. It is needless to say anything in praise of such a universal favorite. They are popular everywhere, both for the brilliant beauty of their flowers and the long continuation of bloom.

HOW TO GROW PANSIES.—Pansies grow best and produce the largest flowers in light, rich soil, and cool, moist weather, but will flower freely from spring-sown seed during the hot summer months. Sow the seed thinly in quite shallow drills as early in the spring as the soil can be dug in fine, loose condition. When the young plants are well started thin them out or transplant to fresh beds, setting them eight inches apart each way. Another sowing may be made about July 1st for fall blooming, and as the soil is liable to be rather dry it should be packed firmly over the freshly sown seed. Plants raised from this sowing will produce fine, large flowers in the fall. For planting in cold frames for early spring flowering the seed should be sown the latter part of August or early in September. It is not well to try to start them in the house or hot-bed, as the air is too warm and close. Under these conditions they shoot up rapidly, are quite thin and spindling, and produce only small-sized flowers, but as pot plants for flowering in a cool room in winter they will bloom quite nicely.



IMPERIAL GERMAN PANSIES.

Imperial German Pansies

The Imperial German Pansies are famous for their almost endless variety of charming shades of color, united with **large size and perfect form** of flowers. They embrace all the solid or self-colors, delicately shaded flowers, five-spotted or three-spotted; edged or bordered flowers of various colors, each with a distinct rim of white, yellow or blue; dark and light marbled varieties: flowers with clear, distinct eyes; striped flowers of striking beauty, and vividly colored fancy varieties, blotched, veined, marbled and margined.

Finest Mixed, pkt. 10c.

Improved Giant Trimardeau

An entirely distinct and beautiful race with flowers of the richest and most varied shades of colors. Plants are vigorous, compact growth. Remarkable for the extra large size of the flowers, which, however, are not so circular in form as the Imperial German. The flowers, which possess unusual substance and consistency, are each marked with three large blotches or spots.

Pkt. 10c.

Madame Perret Pansies

The flowers of this strain are of mammoth size, good substance, and finest colorings. Under favorable conditions the flowers frequently measure from two and a half to four inches across, but a cool location and very rich soil are needed to produce flowers of this size. The mixture embraces many of the fine-named sorts which have been developed to this large size; all the flowers are varied and beautiful in shades and markings.

Finest mixed, all colors; pkt. 10c.

Peas, Everlasting

(**Lathyrus Latifolius.**) A perennial climber, producing a succession of clusters of white, rose or purple blossoms. Suitable for trellises, arbors, etc. Hardy perennial; ten feet high.

Mixed; pkt. 5c.

Petunia



PETUNIA.

Petunias are unsurpassed for massing in beds. Their richness of color, duration of bloom and easy culture will always render them popular. They do well sown in open border in spring, or earlier in cold frame or hot bed, and transplanted eighteen inches apart. Tender perennial, but blooms profusely the first season. One and a half feet high. The fully double Petunias do not produce seed, so that to procure double flowering plants we must use seed of single flowers which have been carefully fertilized by pollen from double ones. The seed we offer is the result of careful hybridization, and can be depended upon to give as large a proportion of double flowers as any.

Finest double, mixed, pkt. 20c.

Finest large flowering, mixed, pkt. 10c.

Phlox Drummondii



PHLOX DRUMMONDI.

Very hardy annuals, thriving in almost any situation, and unequalled in magnificent display of their many and brilliant flowers. Plants from seeds sown in open ground in fall or early spring will begin flowering about July 1st and remain literally covered with bloom until after severe frosts late in autumn. For masses of separate colors or for cutting for bouquets, they are unsurpassed. One foot high.

Finest Mixed. Composed of the best of the large flowered varieties, **Pkt. 5c.**

Pink

(**Dianthus.**) The Dianthus family furnishes the florist with many of his most beautiful flowers, including the Carnation, Sweet William and Florists' Pink, Chinese and Japanese in all their varieties. Hardy and half-hardy biennials and perennials, but nearly all blooming the first year from seed.

DOUBLE CHINA MIXED. A biennial of dwarf habit; flowers the first year, but the bloom is stronger the second.

Pkt. 5c.



PINK.

POPPY

(*Papaver*.) Well known hardy annuals, flowering in great profusion throughout the summer.

ICELAND SINGLE MIXED. The delicate, fragrant flowers are exceedingly beautiful; their long stems make them exceedingly useful for cutting. The plants are perfectly hardy, easily cultivated, and the lovely white, yellow and orange-red flowers are in bloom from early summer until fall. Hardy perennial, blooming the first year from seed. **Pkt. 5c.**

THE SHIRLEY. Everyone knows the old common corn poppy, or red weed, with its bright scarlet flowers. The Shirley is a strain of this magnificent species, which sports to numberless shades of colors, from pure white to rose, pink, carmine and deepest crimson. If the flowers are cut when they first open, they may be kept many days. **Pkt. 5c.**

TULIP FLOWERED. Produces large, splendid, bright scarlet flowers well above the foliage. The petals form a tulip-shaped cup, and after a time black spots appear at the base of each petal. Strikingly beautiful, reminding one of a bed of brilliant tulips; hardy annual; about one foot high. **Pkt. 5c.**

IMPROVED DOUBLE CARNATION, MIXED. In dazzling richness and variety of colors the flowers are very showy. Simply scatter the seed in the open ground and a mass of beauty will result; hardy annual, two-feet high. **Pkt. 5c.**

Papaver Somniferum, of which the Carnation Poppy is an improved form, is the species used for the extraction of opium.



CARNATION.
IMPROVED DOUBLE

Portulaca

There are scarcely any flowers in cultivation that make such a dazzling display of color as a bed of *Portulacas*. They are in bloom from about the first of July till killed by frost in autumn. Tender annual; about six to eight inches high. **Fine mixed single, pkt. 5c. Finest mixed double, pkt. 5c.**

SCABIOSA—See Morning Bride.

Sunflower

Valuable as a screen to hide unsightly places, and as a background for lawns. Hardy annual.

GLOBOSUS FISTULOSUS. Produces very large, exceedingly double flowers of bright yellow color; plants about five feet high. **Pkt. 5c.**

MAMMOTH RUSSIAN. The giant among sunflowers; grows about six feet high. The stocks are sometimes used for fuel. **Pkt. 5c.**

Stocks

The stocks as now grown are indispensable where a fine display of flowers is wanted. To such perfection has selection brought them that good seed will give a large proportion of flowers as double and as large as the named sorts grown from cuttings.

Double German Ten Weeks, mixed. **Pkt. 5c.**

Snapdragon

(*Antirrhinum*.) An old border plant with dark and glossy leaves and long spikes of curiously shaped, brilliantly colored flowers, with finely marked throats. They have been much improved of late years by careful selection. They blossom the first season from seed sown in spring. Tender perennial; one and one-half to two feet high. **Finest mixed. Pkt. 5c.**



STOCKS.

SWEET PEAS



A Few Rules for the Successful Cultivation of Sweet Peas

Early in the spring make a trench about six inches deep, in rich, mellow soil, so arranged that no water can stand in it, and plant the seed in the bottom, taking care not to cover it more than two inches. When the plants are about five inches high, fill up the trench, and furnish some support for the vines to run upon. The plants should not be raised for two successive seasons upon the same ground.

Sweet peas should not be planted on the same ground after culinary peas.

Excessive manuring with stable manure in the row immediately before sowing the seed is not desirable. Ground intended for Sweet Peas, if not left in good condition after taking the last crop, will be better for manuring the previous fall rather than at the spring seeding.

The use of artificial fertilizers, bone meal, nitrate of soda, etc., can be made in spring at the time of planting or soon after.

Thin sowing, by which is meant planting the seeds from four to six inches apart, is conducive to vigor and strength of the plants which come later into bloom, but continue much longer than the plants from thick seeding.

Frequent stirring of the soil with hoe or cultivator in dry weather, thus producing a dust mulch, is preferable to artificial watering, unless irrigation facilities afford opportunities for a regular and abundant supply of water.

Do not allow any flowers to go to seed or the plants will stop blooming.

OUR STOCKS are absolutely unsurpassed. **OUR PRICES** are reasonable, being lower than those of many other firms, but were we to charge twice as much the **quality** of the stocks could not be improved.

This list embraces only the best Tall Sweet Peas, all at the uniform net price, except where otherwise priced, of **5c per pkt**; **10c per oz**; **20c per ¼ lb**; **60c per lb**, post-paid. By express, not prepaid, **50c per lb**.

Varieties preceded by an asterisk (*) represent the best of their respective types.

SWEET PEAS—Continued

***ADMIRATION.** A grand large flower of beautiful form, firm, lasting substance, and most distinct, being self-colored in a delicate shade of rosy lavender. The great freedom of bloom, combined with the delicate coloring, render this one of the very choicest varieties to cut for florists' use—blending finely with the deeper shades. $\frac{1}{4}$ lb. 25c; lb. 75c.

***AMERICA.** Heavily striped with bright blood-red on silvery white ground; large size, open form. Standard indented on top, narrow base. This is the brightest striped variety we have. Very showy.

***AURORA.** Flowers of extra large size, uniformly three on a long stem. Both standard and wings beautifully flaked with bright orange-salmon on a creamy white ground. The finest of all striped Sweet Peas.

***COUNTESS CADOGAN.** Standard opens nearly purple but soon changes to lilac, and later to blue; wings bright blue, shading lighter at edges. The color effect is that of a bright blue; very attractive in shade and of the finest form. $\frac{1}{4}$ lb. 25c; lb. 75c.

***COUNTESS SPENCER.** Bright, clear pink, showing a little deeper at the edges. The form is open and the margins of the petals are wavy. Both standard and wings are very large, the blossoms usually measuring two inches across. The stems are long and it possesses every characteristic that can be desired in a sweet pea. Per $\frac{1}{4}$ lb. 30c; lb. \$1.00.

***DOROTHY ECKFORD.** The best pure white in existence. Is semi-hooded, of the best form, with large wings and very large standard, which averages two inches across. Is similar in effect to *Blanche Burpee*, but is fully one-half larger. *Sadie Burpee*, *Blanche Burpee*, and *The Bride* are all superseded by this variety. Per $\frac{1}{4}$ lb. 25c; lb. 75c.

***DAINTY.** This unique new Sweet Pea has created quite a furore in England as well as in America. Flowers are of largest size and splendid substance, while they are borne three and four, set well at the end of long, stout stems. The beautifully formed flowers, upon first opening, appear to be white, but quickly change to white with pink edge, making a most charming contrast. $\frac{1}{4}$ lb. 30c; lb. \$1.00.

EMILY HENDERSON. Pure white, large size, open form; standard is narrow at the base, is indented at the top and is inclined to curve back at the sides. The texture of the petals is heavier than the other whites, and it will look well with less care than other varieties. It has very thick stems, blossoms profusely, and grows vigorously. It is not so graceful nor so delicately formed as the hooded whites, but is more popular. Not equal to *Dorothy Eckford*. Per lb. 50c.

EXTRA EARLY BLANCHE FERRY. An improved strain of the popular *Blanche Ferry*, of dwarf habit and very early blossoming, commencing to flower fully a week in advance of the regular strain; flowers are quite large and three on a stem; standards bright, rich pink; wings, generally described as white, are always tinged with rosy pink. Per lb. 50c.

***GORGEOUS.** Flowers of larger size, much richer coloring, and more lasting under the hot sun than most other deep orange Sweet Peas. The standards are erect, broadly expanded, richly suffused with deep salmon-orange, and heavily veined with a still deeper shade. Wings quite large and suffused with orange-salmon of a deeper shade than in the standards. The color is rich, glowing and most effective.

***HELEN PIERCE.** Pure white, veined, mottled and marbled with bright blue. The base of the petals does not show the color, while the back of the standard is quite heavily colored. The coloring is very unique and can be described as being colored and marked like a blue mottled *Gloxinia*. Per $\frac{1}{4}$ lb. 50c; lb. \$1.50.

***JEANIE GORDON.** Standard rose, showing veins of a brighter and deeper rose, on primrose ground. Wings primrose tinged with pink. Large size, hooded form. $\frac{1}{4}$ lb. 25c; lb. 75c.

KATHERINE TRACY. The color is soft but brilliant pink, of precisely the same shade in wings and standard. Its form is perfect, and the strong-growing plants are vigorous and give a wonderful profusion of flowers, which continue large and fine until the end of the season. In hardness, prolific flowering habit, durability and practical usefulness this is greatly superior to most sorts of recent introduction, though not equal to *Prima Donna*.

***KING EDWARD VII.** Bright red or crimson scarlet. Almost self-colored, but the standard is a little brighter than the wings. Very large size, open form. This is decidedly the finest bright red Sweet Pea in cultivation. Per $\frac{1}{4}$ lb. 25c; lb. 75c.

***LADY GRISEL HAMILTON.** Most attractive light lavender shading; flowers of best hooded form and extra large size, even larger than those of *New Countess*. Standard light lavender with azure-blue wings; very light and dainty in effect. This variety has superseded *Countess of Radnor* and *New Countess*, being vastly superior to either. $\frac{1}{4}$ lb. 25c; lb. 75c.

LADY NINA BALFOUR. The flowers have the largest expanded form with beautiful hooded standard. The coloring is a delicate light lavender or lilac, entirely free from reddish tone, closely approaching the lovely shade formerly called "mouse-colored."

***MAID OF HONOR.** Standard white shaded at top with lilac. Wings white, very lightly shaded with lavender. Rim of both standard and wings deep lilac. Medium size hooded form. This variety is probably better understood as light butterfly, and is almost a true white, blue edged.

SWEET PEAS—Continued

***MAJESTIC.** The standard is a deep rose-pink, of rich tone, while the wings are also deep rose, but even softer in tone. Borne almost uniformly three on a stem, and all facing one way, the flowers are of the largest size and most perfect form, slightly hooded. They are practically a self color. One of the most lovely Sweet Peas yet introduced.

***MISS WILLMOTT.** Standard orange-pink, showing veins of deeper orange-pink. Wings rose with strong tint of orange, showing veins of orange rose. Very large size, semi-hooded form of the very best type. Stems long and large, and plant very vigorous. It is the largest and best of all this shade. **Oriental, Lady Penzance and Chancellor** are practically the same shade, but not so large and effective. $\frac{1}{4}$ lb. 25c; lb. 75c.

***NAVY BLUE.** The richest and most distinct shade in dark-colored Sweet Peas. The large flowers are of a deep glowing violet purple, having the effect of a **dark navy blue**, although on close examination, the standard shows a faint tinge of claret or wine-red. The flowers are practically self-colored, and the deep rich coloring is grandly effective, either alone or when in a combination with other colors. Flowers are much darker than those of **Countess Cadogan**. $\frac{1}{4}$ lb. 25c; lb. 75c.

***NEW COUNTESS.** An improved **Countess of Radnor**, in which is eliminated the reddish cast in standard, the flowers being a clear, light lavender. The shade is very attractive when seen in a large bouquet composed solely of this variety.

***OTHELLO.** A deep maroon self-color; very large size; standard slightly hooded, widely expanded, and of grand hooded form.

***PRIMA DONNA.** A beautiful shade of pure pink, self-colored. Flowers of large size and fine form. The vine is a very vigorous grower and there are usually four blossoms to the stem. It is the best of the light pink varieties.

***QUEEN VICTORIA.** The nearest approach to yellow in Sweet Peas, excepting only **Stella Morse**, from which it is distinct in shade. Color, a soft primrose-yellow slightly overlaid with faint purple, which imparts a much deeper tone. Flowers of very large size and fine form, erect, slightly pointed, with edges finely recurved. Being black seeded, it is much more sure to germinate, and grows more vigorously than the white seeded primrose varieties.

***SALOPIAN.** Flowers of largest size and finely hooded form, are borne uniformly three on a stem. As a cut flower this grand sort far surpasses all other scarlets in size, brilliancy and lasting substances, the color being equally pleasing in strong or subdued daylight and also by artificial light. Far superior to **Brilliant** and **Firefly**, which are much smaller.

***SHAHZADA.** Flowers of large size and fine, expanded form; coloring rich dark maroon, with a tint of purple in the center of the standard and the inner portion of the wings.

***STELLA MORSE.** This is a most distinct shade, the flowers having a rich apricot tint, as shown in the **Safrano Rose**. The color effect is deeper than in any other of the cream-tinted varieties, as a faint tinge of pink underlying the rich, creamy shading produces a true apricot tint. One of the most desirable varieties for cut flowers.

THE HON. MRS. E. KENYON. A beautiful primrose color, deeper than any other in that shade, a bold giant flower and a most desirable variety. This is really very fine and can be described briefly as an **enlarged and improved Mrs. Eckford**. $\frac{1}{4}$ lb. 25c; lb. 75c.

Mixtures of Sweet Peas

One of the most satisfactory ways of growing Sweet Peas is in a mixed row. The mixtures we offer, are not made up of inferior or cheap stocks, but are of the **very best qualities** and are well proportioned so as to give a pleasing variety of bloom.

***FINEST MIXED.** This mixture consists only of the best large flowering sorts, new and old, in just the right proportions of white, bright red, pink, mauve and other colors to make the most brilliant show possible in the garden. We have given a great deal of study to selecting the best sorts, in proper proportions, and offer this mixture as the finest produced. We know it cannot be excelled at any price. **Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 20c; lb. 50c, postpaid.**

***CHOICE MIXED.** A cheap mixture, but a very good one, containing all the distinct shades and colors of the older and also many of the comparatively new varieties, but not the most recent introductions. **Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 15c; lb. 40c, postpaid.**

***COMMON MIXED.** To meet competition in low prices we offer this **"CHEAP MIXED"** at 30 cts. per pound, postpaid—But we do not recommend it. It will, of course please thousands to whom a **Sweet Pea IS a Sweet Pea**, and who have not learned yet how much more beautiful are the **improved large-flowering Sweet Peas of today**. **Per oz. 5c; 3 ozs. 10c; lb. 30c; $\frac{3}{2}$ lbs. \$1.00, postpaid.** By express 20c per lb.

Dwarf Cupid Sweet Peas

This race of Sweet Peas originated in California and does remarkably well there, notwithstanding the summers are very dry and long. They are a type which spreads on the ground similar to a Verbena, sometimes being from eighteen to twenty-four inches in diameter, and rarely growing more than six or eight inches tall when in full bloom. The blossoms are always large, usually larger than the same variety in the tall growing sorts. The stems are usually short, not more than three or four inches long, and there are usually three blossoms to the stem, crowded quite close to the top. Unfortunately the white seeded White or original Cupid did not germinate well following its first year of introduction, which has affected the popularity of the whole race. The seed of this particular variety has a very thin skin and rapidly absorbs moisture, and unless planted near the top of the ground and in moderately dry soil it quickly rots and will not sprout. While this is true of nearly all white seeded varieties of Sweet Peas, it is much more the case with White Cupid.

Cupids are quite effective as a bedding plant, but look particularly well as a border plant and fill the same place in the garden which we usually devote to Dwarf Candytuft or Dwarf Alyssum.

TRIAL GROUNDS MIXTURE. This new mixture contains most of the shades in the Tall Sweet Peas, blended in suitable proportions. We are sure this superb and showy mixture will make friends everywhere for Dwarf Cupid Sweet Peas. **Large pkt. 10c; oz. 15c; ¼ lb. 40c; lb. \$1.50, postpaid.**

Bush Sweet Peas

This is a new race of entirely distinct growth, first introduced in 1899. It has proved very satisfactory in growth and freedom of flower, particularly in light, warm soils. The plants are erect, fifteen to eighteen inches high when in full flower, but branches freely so that the close bushes are frequently fifteen inches and more in diameter, composed of short, erect branches with abundant light green foliage. The tendrils at ends of the leaves clasp themselves closely to the adjoining branches, so that the whole plant is held quite erect, though sufficiently open to admit of a freer circulation of air than in the low, compact form of the Cupid type. The flowers, while not so large, are of as fine form and beautiful coloring as the tall varieties, and are quite distinct from the Cupid type in being borne on long slender stems. As the stems of flowers can be cut with some of the neat, attractive foliage, they are most desirable for bunching in bouquets or used as floral decorations.

FINEST MIXED. Pkt. 5c; oz. 10c; ¼ lb. 30c; lb. \$1.00.

Double Sweet Peas

We do not consider these so beautiful as the expanded large single flowers. We have as good a strain as any, but not more than about thirty per cent of the flowers, as yet, come double from the seed. From the most carefully selected stock seed, saved only from the best plants bearing double flowers.

FINEST MIXED. Pkt. 5c; oz. 10c; 2 ozs. 15c; ¼ lb. 25c; lb. 75c, by mail, postpaid.

Sweet William

(*Dianthus Barbatus*.) For display in the garden the Sweet William is unsurpassed. The seed can be planted very early in the spring, in open ground, and will blossom the following summer; or it can be sown in August, and will make fine blooming plants for spring. Hardy perennial, one and one-half feet high.

Finest mixed, single, pkt. 5c.

Finest mixed, double; pkt. 5c.

TAGETES.—See Marigold.

TROPAEOLUM CANARIENSE — See Canary Bird Flower.

TROPAEOLUM LOBBIANUM — See Nasturtium, Tall.

TROPAEOLUM MINOR — See Nasturtium, Dwarf.



SWEET WILLIAM.

Verbena



MAMMOTH VERBENAS.

MAMMOTH. No plant is more generally cultivated, or more deservedly so, than the Verbena, as no plant excels it for masses in beds on the lawn. In the varieties may be found every color except yellow. If sown in open ground in May they will bloom in August, but if started in the house in pots in winter, they will be in bloom sooner. Half hardy perennial trailer; one foot high. **Finest mixed; embraces all colors. Pkt. 5c.**

Violet

The violets commonly grown by florists are propagated from cuttings. The flowers grown from seed are smaller and more delicately colored.

Sweet Scented; Pkt. 10c.

VIOLA TRICOLOR.—See Pansy.

Wall Flower

(*Cheiranthus Cheiri*.) The large, massive spikes of the Wall Flower are very conspicuous in beds and borders, and are very useful in making bouquets. Sow the seed early in hot-beds, and while the plants are small, prick them out in pots and sink the pots in the earth. On approach of cold weather remove the pots to the house, and the plants will bloom all winter. Tender perennial, one and one-half feet high. **Mixed, double. Pkt. 10c.**

Wild Cucumber

Ornamental climbing Cucumbers with curious fruit, remarkable for its luxuriance and rapidity of growth. Height six feet. Half hardy annual.

ESCHINOCYSTIS LOBATA. Pkt. 5c.

Zinnia

A very showy plant, with large, double, imbricated flowers, which, when fully expanded, might easily be mistaken for Dwarf Dahlias. Half hardy annual; about eighteen inches high.

Double, finest mixed. Pkt. 5c.

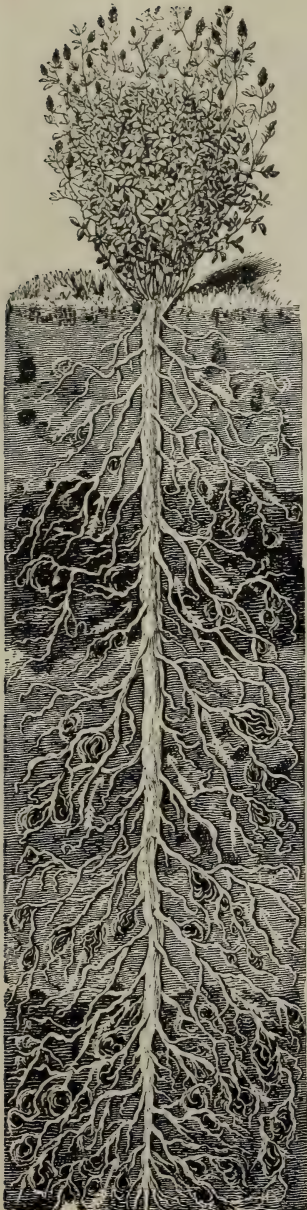


WALL FLOWER.

CLOVER SEEDS

Prices on all Clover Seeds Subject to Change Without Notice. When Clover Seeds are Wanted by Mail or Express, Prepaid, add 8c per Pound for Charges. Write for Special Prices in Quantities.

Alfalfa or Lucerne



The most valuable forage plant, particularly adapted for our Western climate and soil. It requires a deep, mellow soil; newly broken sod does not do so well. It thrives best on a sandy loam (the richer the better), while it has proved a success on heavy, compact clay soil. In the driest and most sultry weather, when every blade of grass withers, Alfalfa is as fresh and green as in the spring, as its roots go down from ten to twenty feet to the moisture of the ground. Although a prodigious yielder, it does not exhaust the soil, but rather improves the ground by the decay of its long roots, and converts it into rich ground, full of vegetable matter. The seed may be sown early in the spring (as soon as the frost is out of the ground), in order to catch the spring rains, as it needs moisture to germinate. In localities where irrigation is used, it can be sown at any time during the summer months. In our State it is not advisable to sow later than the first part of September on account of early frosts, as the young, tender plants, not having sufficient roots, would succumb to our cold winters. Late fall sowing—say in October or November—is not advisable in localities where wind storms are prevalent during winter and early spring, as the seed will be blown away before it has a chance to take root. Most of our alfalfa growers prefer sowing the seed broadcast, while others are more in favor of drilling it in. If the latter plan is pursued, we advise drilling the seed both length and crossways—say half quantity each way—in order to secure a more even stand. There is a great deal of discussion whether the seed should be sown by itself or with other grains, both methods being strongly advocated. Owing to the fact that Alfalfa needs light and sun, the majority of growers suggest sowing the seed by itself, providing it can be put in the ground early in the season, but when the sowing is delayed, we advise to sow oats or barley with it to afford some protection to the young plants against the scorching rays of the sun in midsummer. Another circumstance has to be taken into consideration: If the ground proves to be very weedy, sow in connection with grain, by all means, a crop of barley or oats—they can be raised as well as a crop of weeds. After the grain has been cut, and this should be done as early as possible, it will be found that the alfalfa has made such growth as to prevent any danger of being choked out by the weeds, and it will care for itself. Irrigate immediately after the grain is cut, and the Alfalfa will push out fresh shoots at once, and will furnish a light cutting in the fall, or at least good pasture. It is more difficult to establish the first year, but will, when once started, produce a profitable crop—under favorable circumstances, three and even four crops are cut yearly, aggregating five to seven tons to the acre. Never sow less than twenty pounds of good clean seed to the acre, for thin sowing produces thick and coarse stalks, not relished by stock. The Alfalfa flourishes up to an altitude of about 8,000 feet above the sea level; at higher altitudes it is not likely to thrive. How long it will live is a question not settled yet. The reports speak of Alfalfa fields in Chili (whence it was brought to California under the name of Chili Clover) that are several hundred years old, still bearing good crops. The proper time to cut it is when the plant is in full bloom. The seeds ripen to perfection, and are a source of considerable revenue to our farmers. If intended to raise Alfalfa for seed, twelve or fifteen pounds is plenty to sow on one acre. The seed has to be saved from the first crop, as the second or third cutting does not mature evenly, does not fill out plump and heavy, and does not possess the proper germinating power. It is worthy of trial in any locality where it has not already been tested. For hay, sow twenty pounds to the acre.

ALFALFA or LUCERNE.

Lb. 20c; 100 lbs. at market price.

CLOVER SEEDS—Continued

Bokhara, Sweet, or Bee Clover

Is a tall, shrubby plant, with many white flowers of delicious fragrance, on which bees delight to feed. It will grow on poor soil, and can there be sown and plowed under and used as a fertilizer. Sow at the rate of fifteen pounds to the acre.

Lb. 20c; 100 lbs. at market price.



ALSYKE.

Alsike, or Swedish

The advantage which the Alsike Clover has over Red Clover and other varieties are its hardiness and true perennial character. It will adapt itself to a great variety of soils, growing on the edge of a stream or in a swamp and on low ground, and yet flourish on dry and stubborn stiff clays and upland soils. It is capable of resisting the extremes of drought and wet alike. It is well liked by all stock, either green in pasture or cured for hay. Horses, cows and sheep prefer it to Red Clover. It makes finer and better hay as the stocks are not so thick and woody as those of Red Clover. It is very sweet and fragrant, and liked by bees. Grows fifteen to twenty-four inches high, heads are round, flesh-colored. It can with advantage be sown together with Timothy, as both will grow on low ground and moist soil and mature and ripen together at about the same time. If grown for the seed, this is taken from the first cutting.

When sown by itself, six pounds of seed are required per acre.

Lb. 25c; 100 lbs. at market price.

White, or Dutch

A small, creeping perennial variety, valuable for pasturage and for lawns. It accommodates itself to a variety of soils, but prefers moist ground. Being very hardy and of a creeping habit, it will also prevent the ground from being washed by heavy rains. It is rarely sown alone, but used mainly for sowing with other grass seeds, especially Blue Grass, to obtain permanent pastures. Sow in the spring, at the rate of six pounds per acre, or when used with other grasses, half that amount.

Lb. 35c; 100 lbs. at market price.



WHITE, OR DUTCH.

CLOVER SEEDS—Continued

Crimson Trefoil,

or Scarlet Italian, also called Giant Incarnate, or German Mammoth

Remarkable for its quick growth, and the only Clover which yields a full and heavy crop the first year. Sown in March or April, it is ready to cut in June or July, yielding a heavy crop of fine hay, and will grow up again from the roots in a short time and furnish good pasture for the rest of the season. Crimson Clover is valuable as a catch crop when short of early pasture, or where the new seeding was hurt by drought or otherwise, and the hay crop and pasture would be short. Crimson Clover mixed with the quick-growing Italian Rye Grass will make a good and full crop when sown in early spring, and make up for the shortage. We have prepared a special Clover Grass Mixture for this purpose, and this has given entire satisfaction. For hog pastures Crimson Clover is invaluable where quick results are wanted. Crimson Clover will grow on almost any soil. From twelve to fifteen pounds of seed is sown per acre. Its average height is about two feet; its stools heavy, covering the ground completely with a heavy and thick growth of foliage. It is usually ready to cut for hay in about eight weeks from the time of sowing, and after mowing can in a short time be pastured until late in the fall.

Lb. 20c; 100 lbs. at market price.



CRIMSON TREFOIL, OR SCARLET ITALIAN.

Medium Red, or June

This is by far the most important of all the varieties for practical purposes. Sow in the spring or fall, and if no other grasses are used, at the rate of twelve to fifteen pounds per acre; more is required on old, stiff soils than on new and lighter ones.

Lb. 20c; 100 lbs. at market price.



MEDIUM RED, or JUNE.

GRASS SEEDS

Prices on all grass seeds subject to change without notice. When grass seeds are wanted by mail or express, prepaid, add 8 cents per pound for charges. Write for special prices on quantities.

WHEN AND HOW TO SOW THE SEED.

The most rapid way of obtaining a grass crop is to sow the grass seed alone without any grain or nurse crop. If this is done early in the spring a nearly full crop of hay or pasture can be had the same year and a heavy one the next year. Many farmers sow grass seeds in the spring with grain to save labor, and as they suppose, to protect the young plants. However, it involves the loss of a year in either hay or pasture, aside from endangering the grass, and likely losing it altogether. The young plants are in no way protected by the grain, and when this is cut the young grass and clover is very tender, having been shaded by the grain, and the cutting or harvesting of the so-called nurse crop suddenly exposes the young grass to the sun at the hottest season of the year. There is great danger then that it will be burned out. When the grass is sown by itself the young plants are hardened and more able to withstand the hot and dry sun.

After the ground is carefully prepared, the seed is sown broadcast, which can be nicely and evenly done and very quickly with the little hand seeders. As grass seed is very fine and should not be covered very deep, the natural covering which may or may not take place after a shower of rain or after the action of early spring frosts, is sometimes sufficient, and sometimes this succeeds perfectly. However, it is best, and usually more certain, to depend upon some other way of covering the seed. A very good way is to roll the land. The pressure of a common farm roller on clover or grass seed, sown on the freshly harrowed soil, covers it slightly, and is almost sufficient, besides being one of the best means to insure the quick and even germinating of the seed. Another good way to cover the fine seed is to pass an evenly made brush harrow over it.

TIMOTHY (*Phleum pratense*.) This is the most valuable of all the grasses for hay, especially in the North. Thrives best on moist, loamy soils of medium tenacity. It should be cut just when the blossom falls. Sow early in the spring or fall, at the rate of twelve pounds per acre, if alone, but less if mixed with other grasses.

Lb. 15c; 100 lbs. at market price.



RED TOP.

FANCY RED TOP, CLEAR, OR SOLID SEED. During the past few years cleaning machinery for separating the solid seed from the chaff has been perfected, and it is thereby possible to offer clear or solid seed, known also as Fancy Red Top. This is naturally much higher priced than the other, which contains chaff, but in the end it is found the cheapest. We consider one pound of the Fancy Red Top equal to three pounds or even more, of Chaff Red Top, and this means that one pound of Fancy seed will go as far as three or four pounds of the Chaff seed.

Lb. 20c; 100 lbs. at market price.

GRASS SEEDS—Continued

BROMUS INERMIS. Also known as Austrian Brome Grass and Awnless Brome Grass. Of all the varieties of the cultivated grasses this can be considered the best and most promising for this country. It is a native of Europe, but it is not a new and untried variety in this country any more. It has been sown and tried in nearly all parts of the country and proved to be well adapted for different conditions of soil and climate. It is not only a grass for the prairies of the West, the cold regions of the North, or sections of the country suffering from severe drought, or the grass for Minnesota, the Dakotas, Nebraska, Colorado, Montana, Texas, Kansas, Idaho, Utah, Wyoming, but well adapted and profitable to grow in the Eastern and Middle States; in fact, everywhere wherever a luxuriant, heavy and sure growth of grass is wanted. It is well adapted for either hay or pasture, and will produce a very heavy yield of both. It comes up early in the spring, makes a rapid growth, can be cut for hay early, and used for pasture afterwards, making abundant pasturage. It remains fresher and greener during the larger part of the year than almost any other grass. It is thoroughly permanent and very hardy, enduring very low temperature in the winter and having great power to grow in dry climates and resist drought and thrive and give abundant pasture or hay crops in dry seasons, when everything else would fail. It will grow on all kinds of soil. All kinds of stock eat it greedily, and it is very rich in nutritive value or flesh forming ingredients. It is easily cultivated, since it is suited to all soils. It is sown early in the spring in the same way as other grass seeds, and since it is rather slow to start and does not make much growth the first year, is well suited to sow with grain for a nurse crop. About 25 to 30 pounds of seed should be sown per acre. It grows two to four feet high, flowering in June, and is a true perennial.

Bromus Inermis should at least be tried by every farmer, and large tracts can just as safely be sown since the great value of it has been so well established. It is a grass which cannot be obtained too soon by all farmers.

Lb. 20c. 100 lbs. at market price.



MEADOW FESCUE.



BROMUS INERMIS.

GRASS SEEDS—Continued

MEADOW FESCUE (*Festuca pratensis*.) We regard this as one of the most valuable grasses for several reasons, chief among them is that it adapts itself to different conditions of soil and climate, and does well all over the United States and Canada, and is also highly valued and largely cultivated throughout Europe. It gives a good amount of early and late seed of good quality, and yields heavily from two to four tons of hay per acre, which is of fine quality and very nutritious, and as a pasture grass it is particularly valuable, as it is a most persistent grower, and one of the earliest in spring and the latest in the fall. It never freezes out or winter-kills. It resists drought and cold winters, and does not die out. It grows well on wet or dry bottoms, hillsides and tops, gravelly and loamy lands and clays, and having many fibrous roots running down 8 to 15 inches, resists the drought. Meadow Fescue is also known as Randall Grass, Evergreen Grass, or English Blue Grass. It grows about three feet high, stools out well, but never grows in tufts, and flowers in June. One ounce of the seed contains about 22,000 kernels. About 25 to 30 pounds of seed should be used per acre.

We urge everyone to sow this most valuable grass, and if but one acre for trial, although 100 acres can be just as safely sown and good results expected.

Lb. 20c; 100 lbs. at market price.

Orchard Grass

(*Dactylis glomerata*.)



ORCHARD GRASS.

For pasture and hay land a most valuable grass, and on account of its earliness very valuable for permanent pastures. 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 is much given to growing in tufts, and is therefore not adapted for sowing alone or by itself; but when sown together with other grasses or in Clover-Grass mixtures, a close and even sod can be had. It is well suited to shady places, such as orchards and groves. Although it is adapted for a wide range of soil, and will grow on almost all land, it gives best results on deep, rich sandy loam or clay soils.

When grown for hay, we have found that best results are obtained when it is sown together with Tall Meadow Oat Grass and Meadow Foxtail. These are all early, flowering about the time of Red Clover, which can be included, and can be cut at the same time, when a yield of two to four tons per acre of splendid and nutritious hay can be obtained, and as all these varieties are of very heavy and strong aftergrowth, splendid pasture can be had the rest of the year. This is of so great value, especially to dairy farmers, that we have selected a special Orchard Grass Mixture. Sow 25 to 30 pounds to the acre.

Lb. 20c; 100 lbs. at market price.

GRASS SEEDS—Continued



ITALIAN RYE GRASS.

Italian Rye Grass

(Lolium italicum.)

It is one of the grasses not well known but very valuable, and deserving more attention. It grows on almost any soil, but thrives best in rich, moist land. Where the ground is favorable, and especially if irrigated, immense crops can be produced, being cut four to five times, and yielding as high as seven to eight tons of dry hay per acre. It is well adapted for pastures, on account of its early growth in spring and its quick and successive aftergrowth, when closely cropped. For this reason we found it very valuable to sow as a catch crop in clover fields where the clover has died or winter killed. When mixed with Crimson Clover and sown on these bare spots in spring a full crop can be counted on from these fields. It grows two to four feet high, with an abundance of foliage, and is much liked by cattle and stock generally. Sow 20 to 25 pounds of seed to the acre.

Lb. 15c; 100 lbs. at market price.

Tall Meadow Oat Grass

(Avena elatior.) For either hay or a permanent pasture a most valuable grass, which can be successfully grown in all parts of the country.

It will not winter-kill, and will live and endure our cold northern winters, and can also be successfully grown in parts of the country where it is sometimes very hot and dry.

It starts very early in spring, and is a very valuable pasture grass on this account.

Succeeds best in deep, rich sandy soils and even on clay and heavy dry soil it does well.

It is a true perennial, growing three to five feet high, flowering in May or June.

Sow twenty to twenty-five pounds to the acre.

Lb. 25c; 100 lbs. at market price.



TALL MEADOW OAT GRASS.

GRASS SEEDS—Continued



ENGLISH RYE GRASS, OR PERENNIAL
RYE GRASS.

English Rye Grass

or Perennial Rye Grass.

(*Lolium Perenne*.) It has become well known in this country, and is very largely sown, and has proven itself very valuable.

It seems to be especially adapted for pastures; will endure close cropping, is of strong and quick successive after-growth.

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 Mixtures.

It is also well adapted for permanent meadows, and it yields large quantities of very nutritious hay, which is well liked by all kinds of stock.

It grows well on almost any land, but prefers medium rich or moist land, such as will produce a good crop of corn, and gives the heaviest yields on such land.

It grows two to three and one-half feet high.

When sown by itself, about twenty to twenty-five pounds of seed per acre is sufficient.

Lb. 15c; 100 lbs. at market price.

Kentucky Blue Grass, Fancy Clean

(*Poa Pratensis*.)

Sometimes called June, but the true June or Wire Grass is much inferior. The Kentucky Blue Grass is the most widely known of all the natural grasses, it does well everywhere, and can be found in almost every part of our broad country. In some parts of the country it seems to grow singularly well—for instance in Kentucky—and this is probably the cause for the name "Kentucky Blue Grass." It is grown more for pasturage than for hay. It is unusually early in spring, and provides good feed already in May and June in our Northwestern States, and again late in the fall until the ground freezes. It is very hardy, and is not injured by the cold, and very hard to kill by hot dry weather and sun, the tramping of hoofs or close mowing. It is suited to any variety of soil, and seems to succeed best on moist, rich land. It requires about two years to become well established, and for this reason should be used only where permanent pastures and meadows are wanted. In conjunction with white clover it forms a splendid lawn; for this purpose use one pound to 200 square feet, or sixty pounds of Blue Grass and six pounds of white clover per acre. If sown by itself for pasturage about thirty pounds per acre will be required. Sow early in the spring, or in October or November.

Lb. 30c; 100 lbs. at market price.

Extra Fine Mixed Lawn Grass

(City Park Mixture.)

The essentials for a fine lawn are: First, a rich, well drained soil; second, careful preparation of the ground, making it as fine and smooth and mellow as possible; third, a wise selection of seeds; fourth, sowing at such a time as to give the young plants a chance to become well established before being subjected to very dry or to very cold weather. However much care is bestowed on the soil and seed, no lawn will be beautiful without frequent mowing and rolling. Too much care cannot be bestowed upon the selection of grasses, as some varieties are the most luxuriant in spring, others in summer, others again in autumn, and a combination of the proper sorts is required for a perfect, carpet-like lawn. We have given much thought and made many experiments to secure the best selections, and think our City Park Mixture is the best possible for permanent lawns. It may be planted early in spring, or fall, and should be sown at the rate of sixty to one hundred pounds per acre; much more is required than for hay or pasturage. If sown in the spring, sow as early as possible, making the surface very fine and smooth, then raking it over and sowing the seed just before a rain, which, if the surface has just been raked, will cover the seed sufficiently. If the expected rain does not come, cover by rolling with a light roller. If sown in the fall, sow before the autumn rains have ceased, and before very cold weather give the young grass a light dressing of manure. One pound of this mixture is sufficient to sow 200 square feet.

Extra Fine Mixed Lawn Grass per lb. 35c; 100 lbs. at market price.

OUR SPECIAL GRASS MIXTURE

FOR HAY AND PERMANENT PASTURES.



Permanent Pastures and Meadows

Since it has come to be an established fact that **Grass is King and the Cow is Queen**, it follows that more cows demand more and better grass and pastures, and how to obtain these is the great question with many farmers.

It is a well known rule of nature that a judiciously selected mixture of several varieties will produce a larger yield than can be obtained if only one variety is sown alone or by itself. When sowing a carefully selected mixture of Grasses and Clover you run less risk than if you had carried all your eggs in one basket, so to speak. Some varieties may live and thrive on your particular piece of land better than others, and these will then have a chance to do their very best. A mixed pasture is earlier, gives a better yield, and holds out better than one sown down with but one kind of Grass. Many varieties sown together occupy the ground more closely, and a larger yield of hay, and of better quality, can always be obtained from a mixed meadow. In a great many parts of the country only one or two kinds of grasses are known and mostly sown, and these are Timothy and Clover. While Timothy is a splendid Grass, and Clover the foundation of all successful farming, both are not permanent, and not well adapted for pasturing; are easily affected by drought or frost, thereby making it necessary to re-sow every year or two, a rather expensive method. In our carefully selected Clover-Grass Mixtures several varieties of the natural Grasses are sown together, and these will cover the ground very closely and make two spears of Grass grow where formerly but one grew; besides, these Clover-Grass Mixtures will stand various climatic and soil conditions better, will last longer or be permanent, and yield heavily or double the quantity of hay that is secured from ordinary fields sown with Timothy and Clover.

Clover Grass Mixtures for Permanent Pastures, Meadows, or Particular Purposes

We selected them with the greatest care and use only such varieties as are best adapted for different kinds of soil and various purposes. Some varieties are of early and others of late growth, and this is a very important consideration when permanent pastures are wanted, and when wanted for mowing, the varieties must be selected so as to ripen nearly at the same time and be of good tall growth, while the low or dwarf growing varieties are better adapted for pasturing.

The prices of our Clover-Grass Mixtures we have always made as low as possible in accordance with the market prices of the seeds, using the best quality of seeds only. Owing to the unusual high prices of the Grass Seeds at the present time, we are obliged to make the prices for our Clover-Grass Mixtures a little higher. It does not cost any more to sow our carefully selected Clover-Grass Mixtures than to sow Clover or Timothy alone, and when permanent results are considered, the Clover-Grass Mixtures are the cheapest by several times.

A.—Clover Grass Mixtures for Permanent Pastures

No. 1.—For high and dry ground, light soils.

Red Top Grass.....	Sow Per Acre.	25 lbs. @18c ..\$ 4.50
Bromus Inermis.....		
Meadow Fescue.....		
English Rye Grass...		
Tall Meadow Oat...		
Lucerne.....	50 lbs. 8.50	
White Clover.....	100 lbs. 16.00	

No. 2. For high and dry grounds, heavy or clay soils.

Meadow Fescue.....	Sow Per Acre.	25 lbs. @18c ..\$ 4.50
Orchard Grass.....		
English Rye Grass...		
Tall Meadow Oat....		
Blue Grass.....		
Italian Rye Grass...	50 lbs. 8.50	100 lbs. 16.00
Timothy.....		
Alsike Clover.....		
Red Clover.....		
White Clover.....		

No. 3. For moist ground and rich soils.

Blue Grass.....	Sow Per Acre.	20 lbs. @18c ..\$ 3.60
Meadow Fescue.....		
Orchard Grass.....		
English Rye Grass...		
Italian Rye Grass...		
Timothy.....	50 lbs. 8.50	100 lbs. 16.00
Red Top Grass.....		
Red Clover.....		
Alsike Clover.....		
White Clover.....		

B.—Clover Grass Mixtures for Particular Purposes

No. 1. We have selected this Clover-Grass Mixture with a view to suit the conditions in the western and extreme north-western states, and for similar conditions elsewhere, and in sections of the country where Timothy or Clover are uncertain and do not succeed well when sown alone, but we include these as we have found that where they are uncertain when sown alone, they are more apt to succeed when sown with other varieties, and should they fail, the other grasses take their place, and so an entire failure is avoided. This Clover-Grass Mixture is adapted to sow on land that will produce a crop of Wheat, Oats, etc., and is selected with a view to produce a crop of hay and pasture afterwards, or can be pastured entirely.

Bromus Inermis.....	Sow Per Acre.	20 lbs. @20c ..\$ 4.00
Meadow Fescue.....		
Tall Meadow Oat....		
Orchard Grass.....		
Timothy.....		
Blue Grass.....	50 lbs. 9.50	100 lbs. 18.00
Red Top Grass.....		
Alsike Clover.....		
White Clover.....		
Red Clover.....		

No. 3. Crimson Clover-Grass Mixture or Special Renovating Clover-Grass Mixture, or Quick Return Mixture.—We selected and made this up for rapid growth with a view to use for either alternate husbandry or as a catch crop. When sown in early spring, March or April, it will give a full crop of hay in July and pasture for the rest of the year. It can also be sown in fields where the Clover or Grass has mostly been winter killed, or otherwise injured, and where bare spots are in the spring, when it will be ready to cut with the other Grass or Clover, and a full crop from such field with bare spots can thereby be secured.

When used for sowing in fields where there is some Grass or Clover already, the quantity to be sown per acre must be according to the stand of Grass or Clover. Usually five to ten pounds per acre is sufficient.

Crimson Clover.....	Sow Per Acre.	15 lbs. @16c ..\$ 2.40
Italian Rye Grass...		
English Rye Grass...		
Tall Meadow Oat....		
Timothy.....		
Red Clover.....	50 lbs. 7.50	100 lbs. 14.00

C.—Clover Grass Mixtures for Particular Purposes

No. 2. Dairy Farmers' or Orchard Clover-Grass Mixture. We have selected only the earliest, hardiest, best and quickest growing varieties for this Clover-Grass Mixture. Dairy farmers want to cut a crop of hay very early and have pasture for the rest of the season, or make two crops of hay in a season; and this especially selected Clover-Grass Mixture is admirably adapted for this purpose. It is suited for good or medium soils, which will produce a good crop of corn or wheat, and can be sown anywhere in any part of the country.

Orchard Grass.....	Sow Per Acre.	20 lbs. @18c ..\$ 3.60
Tall Meadow Oat....		
English Rye Grass...		
Italian Rye Grass...		
Meadow Fescue.....		
Red Clover.....	50 lbs. 8.50	100 lbs. 16.00
Alsike Clover.....		
Timothy.....		

No. 4. This is our **Special Alfalfa, or Lucerne Clover-Grass Mixture**, and consists mainly of Alfalfa, Bromus Inermis and such varieties of grass as will stand drought and flourish on poor soils and give larger yields in the driest summers, after once being established. The quantity required per acre is 15 pounds. **15 lbs. \$2.75; 50 lbs. \$8.50; 100 lbs. \$16.00.**

FORAGE AND FODDER PLANTS AND MISCELLANEOUS SEEDS

Prices on the following subject to change. If wanted by mail or express prepaid add 8c per pound for charges. Write for special prices on quantities.

Probably no other plants are so popular and well-known as Millet and Hungarian. When drought is cutting the hay crop short, either one can be sown to make up the shortage. When the season is very dry there is such a demand for Millet and Hungarian that it cannot be had at any price. It will therefore be to your advantage to send your order early.

German, or Golden Millet

An improved variety, medium early. Requires a dry, light, rich soil and grows three to five feet high. The heads are closely condensed, though the spikes are very numerous, with a fine bulk of stock and leaves, and is excellent for forage. The seeds are contained in rough, bristly sheaths and are round, golden yellow and beautiful in appearance. No other grass or forage plant has been able to produce the enormous yield of this plant. It has produced from four to five tons of hay to the acre, and from seventy to eighty bushels of seed. It is sown in the spring on newly broken prairie, and after harvesting it leaves the ground in the finest condition for wheat. For hay sow broadcast at from twenty-five to thirty pounds to the acre, from May 1st to August 1st. For grain, sow in drills, about fifteen pounds to the acre and not later than June 20th.

Lb. 10c; 100 lbs. at market price.

Hungarian Millet

This is a specie of annual millet and is preferred by many because it is not so rank and has finer stalks than millet, and consequently makes finer hay and fodder. It endures dry weather remarkably well, and can be sown late in the summer, even after the hay is cut, or in the stubble when it is turned over and prepared right after cutting the grain. Sow about thirty pounds to the acre.

Lb. 10c; 100 lbs. at market price.

Russian, or Siberian Millet

An excellent Millet, introduced several years ago from Russia, which has largely superseded German and Common Millet, as well as Hungarian.

The plant grows larger than Common Millet, with beard and chaff similar to Hungarian; the plant making a ranker growth, produces more leaves than either Common Millet, German Millet, or Hungarian, leaves starting close to the ground and continuing nearly to top of stem; leaves wide and tender, making it preferable to other millets for hay. Yields one-third to one-half more per acre, besides hay softer when cured, greener in color and preferred by stock to other Hay or Millets.

It matures about the same time as Common Millet and Hungarian and earlier than German Millet. It will stand drought better than other varieties of Millet. Particularly valuable in sections where the season is short. An excellent crop to clean ground from foul growth and also good as summer fallowing. Yields thirty to forty bushels of seed to the acre, but instances have been known to reach fifty to sixty bushels.

Amount sown per acre varies according to soil, ranging from twenty-five to fifty pounds.

Lb. 10c; 100 lbs. at market price.

Rape, Dwarf Essex

(For Sowing.) There is only one "best" variety of Rape, and that is the Dwarf Essex. Do not be deluded into buying inferior grades by unscrupulous dealers or exaggerated advertisements. **There is no plant that will give as heavy a yield of forage at such a small cost as this,** and its general cultivation would add largely to the profits of American farms. It is especially valuable for green manuring and pasture. When fed off by sheep it will probably do more to restore and make profitable exhausted soils than any other plant. It is a pasture plant which may be eaten off by any kind of live stock, and there is no other plant as valuable for fattening sheep or swine as Rape. It can either be sown broadcast or in drills, and by itself or with some other crop. To provide early pasture for sheep and swine it is sown in the early spring, and as it is a remarkably fast grower, will be ready to be eaten off in six weeks from the time of sowing. It is also sown during June and July on well prepared ground to provide fall pasture for sheep. It can also be sown with grain, using two pounds of seed per acre to provide pasture for sheep after harvest. It is also sown in corn at the time when corn is cultivated for the last time, or it can be sown as a catch crop after oats, rye or early potatoes. When Rape is sown broadcast, 5 to 6 pounds of seed per acre will be sufficient. When sown in rows or drills, say 30 inches apart, and cultivated, 2 to 3 lbs. of seed per acre is enough. A good crop will furnish at least 12 tons of green food per acre, which is nearly double the nutritive or feeding value as that of Clover. One acre of well grown Rape will furnish pasture for ten or twenty sheep for two months, and in that time will fatten them in good form for the market. Dwarf Essex Rape will grow on almost any soil where wheat, rye or corn will grow, and thrive best on low, moist soils, rich in vegetable matter. Slough lands are splendid for growing it. Beware of the worthless annual variety that is often sold, and which is not only worthless for forage, but once planted is liable to become a pernicious weed. Biennial.

Lb. 10c; 100 lbs. at market price.

FORAGE AND FORAGE PLANTS—Continued

Sugar Cane, Early Amber Cane

This variety is successfully grown in our extreme Northern latitudes. It may be planted as late as the 15th of June, and will be ripe enough to manufacture in September. We know of no earlier variety. It is useless to plant Cane seed before the weather is warm in the spring. Five to six lbs. are required per acre.

Lb. 10c; 100 lbs. at market price.

White Kaffir Corn

It grows from four to five feet high, making a straight, upright growth. It has a stalky stem with enormous wide leaves. The stalks keep green and are brittle and juicy, not hardening like other varieties of sorghum, making excellent fodder, either green or dried, which is highly relished by all kinds of stock. The seed heads form at the top of each stalk, and as soon as these show the grain well, the joints next below the top send up shoots which yield the second seed heads. For the grain sow in rows three feet apart, four or five pounds to the acre. For fodder sow forty to fifty pounds to the acre.

Lb. 10c; 100 lbs. at market price.

Field Peas

These are very valuable for fattening stock, and can also be grown for soiling purposes, but are of greater value for fodder when fed as ground feed, or the vines can be fed for hay, which is of great nutritive value for dairy cows and hogs. They are equal to corn and six weeks earlier. Field Peas have been grown by dairymen with very satisfactory results, following Winter Rye, which was cut green in June for dairy cows and cattle, then stubble turned under and sowed to mixed Peas and Oats, furnishing a large amount of forage in August, when grass pastures are usually short, and producing a supply of milk as abundant as in early summer months. The Field Pea does not succeed in the hot climate of the Southern States, but does well in the North and on any soil adapted to Oats and Spring Wheat. Cut and feed green, or if for hogs alone, can be used as pasture. These peas should not be grown on very rich soil, as they will run to vine instead of pod, unless grown for renovating purposes. As a fertilizer they come next to clover, to be ploughed under when they commence to blossom. They will grow on land that will not produce clover. Can be sown separately in drills or broadcast, 100 to 120 lbs. to the acre; or with Oats, 90 pounds of Peas and 50 pounds of Oats to the acre.

Lb. 5c; 100 lbs. at market price.

Flax for Sowing

Sow late enough in the spring to avoid frost, and early enough to secure the early rains. A fair average quantity of seed to be sown to an acre is 30 lbs., when cultivated for seed. If for the fibre, a larger quantity should be sown. Cut before quite ripe, and if the weather be dry, let it lie in the swath a few hours, when it should be raked and secured from the weather. Thresh early in the fall and in dry weather. **Lb. 10c; 100 lbs. at market price.**

Oats, Silver Mine

We consider this one of the best main crop varieties of Oats, and no other variety ever made such a record. It not only equaled, but surpassed all claims made for it, and is pronounced the best, most productive and hardest Oat ever introduced.

It is early, with heavy, stiff straw, bearing large and heavy heads with well filled, plump grain. It has very thin and soft hulls and the plump and meaty berry can be slipped out from it by pressing it between the fingers. On this account it is of the greatest feeding value, and for making oat meal there is no other oat better adapted. Ever since it was introduced it has taken the lead, not only in the quality but also as the heaviest yielding Oat, producing as much as 174 bushels from one bushel of seed sown, and yielding an average of 116 bushels from one bushel of seed sown in seven different states. They are not like most other Oats, which when you put them on good rich ground, they lodge, and sometimes the whole crop is lost, but on account of their long stiff straw, will stand up erect and produce a heavy crop of grain. It is more thankful in this respect than other oats, and this peculiar quality accounts for its heavy yielding. This Oat is never affected by rust, and the grain is always very handsome. It is the best seller on the market, and whoever wants to get an early white Oat, either for himself or to raise for the market, it pays best to get the Silver Mine. Sow about 75 pounds to the acre. **\$2.50 per 100 lbs.**

Sunflower---Mammoth Russian

Everyone who keeps poultry should use Sunflower seed liberally for feeding, as there is nothing more wholesome and nutritious, or which keeps hens in better condition for laying.

This variety has large heads, borne at the top of a single unbranched stem, and having much more and larger seed than the common sort. Sow the seed as soon as the ground is fit for corn, in rows five feet apart and ten inches apart in the row. Cultivate same as corn. When the seed is ripe and hard, cut off the heads and pile loosely in a rail pen having a solid floor or in a corn crib. After curing sufficiently so that they will thresh easily, flail out or run through a threshing machine, and clean with an ordinary fanning mill. This variety will yield 900 to 1,200 pounds of seed per acre ordinarily. Sow about eight pounds to the acre. **Lb. 10c; 100 lbs. at market price.**

POULTRY SUPPLIES

STRICTLY CASH WITH ORDER

If wanted by mail add 16c per pound; by express or freight at purchaser's expense.---Write for special prices on quantities.

Cyphers Chick Food

A Complete and Scientifically Compounded Food for Young Chicks

Cyphers Chick Food is a mixture of many different grains and seeds, so proportioned to the needs of the growing chick that it will be fully nourished. By the term "fully nourished" we mean a great deal. Most feeding stuffs contain too much fat-forming and not enough flesh-and-muscle-forming elements; in consequence the chick develops indigestion and diarrhoea, which ultimately means no digestion at all, and the chick soon starves to death. Or, if partially nourished, leg weakness develops and the chick drags out a miserable existence.

In compounding Cyphers Chick Food, the protein or flesh-and-muscle-forming element is maintained high, the carbohydrate heat-producing and the fat-forming elements are reduced to their proper proportion, and the ash or mineral elements are in sufficient amount to supply the needs of the rapidly growing bird.

Directions for feeding in every bag. Put up in sealed bags only, bearing manufacturer's trade mark and guaranteed analysis.

Price, 50-lb. bag \$1.65; 100-lb bag \$3.00.



Developing Food

Developing food is a special food intended for properly maturing young chicks after they are ready to be weaned from Chick Food, and to carry them along to the age when it is desirable to place before them the larger whole grains. When the chicks are from six to eight weeks old they are able to eat and exhibit a preference for larger particles of grain than found in our Chick Food.

Prices, 50-lb. bag \$1.65; 100-lb. bag \$3.00.

Poultry Supplies—Continued

Purity Beef Scraps

Feed your Poultry **PURITY BEEF SCRAPS**

Conceded to be the

GREATEST EGG PRODUCER on EARTH

Will make your Hens Lay. Will make your Chicks Grow Fast
Will keep your Fowls Healthy

Beef Scraps, if properly prepared, are a wonderful food for laying hens, and a wonderful chick grower. It requires a remarkable equipment to make good Beef Scraps, and there are but a few factories which turn out a good product. The Purity Brand is sweet, clean and very nutritious, and will keep indefinitely.

Pound 10c; 50 lbs. \$2.75; 100 lbs. \$5.00.

Purity Blood Meal

If you want winter eggs **Blood Meal** will bring them—in fact, keeps them busy all the year round.

Makes the plumage bright and glossy and is particularly beneficial during the moulting season.

Blood Meal is the only animal meal on the market that is odorless. All other poultry foods containing animal meal have a very **unpleasant odor**.

Blood Meal contains no ground bone or other cheap adulterations of any kind. It has less than five per cent of moisture, and is the only **perfectly dry** poultry food made. Should never be fed without mixing with other food in proportion of 1 to 15 parts of meal or shorts.

Lb. 10c; 50 lbs. \$3.25; 100 lbs. \$6.00.

Purity Meat Meal

This food is made from pure, sweet meat, blood and the liquor from cooking. It is rich in albumen and protein, and is a nitrogenous food of great egg producing value.

Pound 5c; 50 lbs. \$2.25; 100 lbs. \$4.00.

Poultry Supplies—Continued

Purity Ground Bone

Bone is also a good egg producer, but it is not as valuable for this purpose as beef scraps or meat meal, as it does not contain so much protein. The impression prevails in many quarters that the bone must be fresh or green to be of value as a food. This is not the case. The fresh bone contains about 40 per cent water, 12 per cent grease, or 52 per cent of matter which your fowls do not need or care for, and which also taxes the digestive organs unnecessarily.

Our Bone is made from fresh, green bones, from which the moisture and grease have been taken, leaving nothing but the phosphates, lime and protein. These are the only food properties of bone, green or dry, so when you buy our bone, you get it without paying freight on moisture or grease. Granulated bone will keep in any climate or kind of weather, if kept in a dry place. Bone is especially valuable as an egg-shell producer.

Pound 5c; 50 lbs. \$2.00; 100 lbs. \$3.75.

Crushed Oyster Shells

Every pound of Oyster Shells offered by us is dried by a patent hot-air process and not by direct fire, which burns out some of the most desirable qualities.

Our shells are crushed and ground to the size which expert poultrymen agree to be the best. If you have purchased other brands of oyster shells, you have noticed that there are 10 to 25 lbs. of waste, consisting of dirt and dust, mixed in with every 100 lbs. of shell. **This means a loss to you.** Every pound of shell we sell is all shell and no waste.

It is needless for us to enlarge upon the value of Crushed Oyster Shells for poultry. Every poultry man realizes their importance as an egg-shell maker and general promoter of good health.

Pound 5c; 50 lbs. \$1.25; 100 lbs. \$2.00.

Purity Poultry Grit

It is highly essential that poultry be given a plentiful supply of good, clean, sharp, and lasting Grit. Fowls cannot be healthy if grit is denied them. The **Purity Grit** is made in three sizes—Fine for Chicks, Medium for Fowls Half Grown, and Coarse for Grown Fowls, Turkeys, etc.

It is put up in burlap sacks, and we guarantee that it will suit you. State the size Grit required when ordering. All sizes are the same in price and the same in quality.

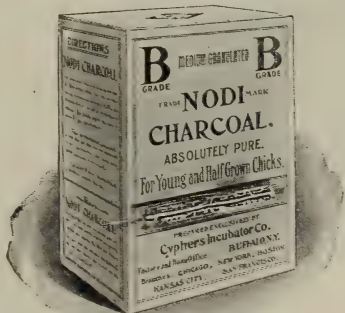
Pound 5c; 50 lbs. \$1.25; 100 lbs. \$2.00.

Nodi Charcoal

No poultryman can afford to be without charcoal, and a little of it goes a long way. It aids digestion and promotes the health of the poultry of all ages. Our Nodi Charcoal is absolutely pure, and is prepared expressly for poultry. It differs widely from the ordinary commercial charcoal offered to poultrymen. It is different in size, differently screened and packed, and does not carry large quantities of useless dust. It is different in grade and always uniform. Nodi Charcoal is prepared by us in three grades: Grade A (fine granulated), for use in mash mixtures. Grade B (medium granulated), for small, newly-hatched to half-grown chicks. Grade C (coarse granulated), for fowls.

Put up in paper cartons and 50-lb. sealed bags, bearing manufacturer's trade-mark.

Prices: (State grade desired, whether A, B or C):
2-lb. carton, 20c; 50-lb. paper lined sealed sacks, \$3.00.



Poultry Supplies—Continued

Vogeler's Egg Food

The Egg Producer of the Age

For All Varieties of Poultry, Laying Fowls, Young Chicks, Ducks, Geese, and Turkeys.

WILL MAKE YOUR HENS LAY When Everything Else Fails. **It Keeps Fowls in Best Condition and Makes Poultry the Most Profitable Stock on the Farm.**

It is estimated that one-half the chicks and turkeys annually hatched die before reaching maturity. When **Vogeler's Egg Food** is fed according to directions, sick and drooping chicks will never be seen. It supplies all the needed material for forming bone, muscle and feathers, and by its gentle tonic effect strengthens the digestive organs and lays the foundation for vigorous, healthy, and therefore profitable fowls. They will also be fitted for market a month earlier than by common treatment.

Moulting Fowls should be fed with **Vogeler's Egg Food** three or four times a week. A little attention during the weakening moulting season will be repaid largely by the early laying condition and the fine appearance of the plumage.

For ordinary feed, mix one pound of the "Vogeler's" thoroughly with fifty weight of meal and half wheat bran, and wet up for morning feed with either hot or cold water.

To Start Laying Rapidly, in the usual quantity of meal, or bran and meal, for 8 or 10 fowls, stir two tablespoonfuls of the **Egg Food** and wet up with hot water in cold weather.

For Young Chickens and Turkeys, mix two teaspoonfuls with the feed for eight or ten, and feed them every other day.

Price, 25c per package.

Now, if you want eggs, give this food a trial; the results will be most satisfying.

Lee's Egg Food

Makes Hens Lay, Makes Chicks Grow, Makes Fowls and Chicks Strong, Healthy and Vigorous.



Lee's Egg Maker is an article that does the desired work in keeping fowls and chicks healthy, thrifty and profitable.

A 25-cent package of **Lee's Egg Maker** weighs 2½ lbs., contains 1¼ lbs. of spices, salts, roots and herbs, and 1¼ lbs. of granulated blood meal, deodorized. The spices, etc., are of variety and kind formerly prepared under the name of **Lee's Tonic Powder**, at 25 cents per 1-lb. package. It supplies materials needed by all fowls—materials which they obtain naturally from the soil, shrubs, insects, etc., on unlimited range, and which you must supply to both fowls and chicks in the domesticated state if they are to do well. Our long experience in this line has taught us that the nearer natural conditions can be followed in the food and treatment of all domestic fowls and animals, the better the results, whether of health, vigor or productiveness.

Lee's Egg Maker will cause fowls and chicks to thrive and do well. It will make hens lay, chicks grow, and keep them all in a healthy, vigorous condition. It is the largest value ever offered to poultry men. The cost of feeding it is very small—about 1 cent per feed for fifty fowls—which expense is more than paid for by an increase of one egg per day.

Prices: 2½-lb. package, each 25c; 5½-lb. package, each 50c; 25-lb. pails, each \$2.00.

Poultry Supplies—Continued

Pratt's Food for Poultry



• TRADE MARK REGISTERED •

It positively cures and prevents chicken cholera, roup, and all diseases.

It makes young chickens grow quickly and profitably.

It will increase the quantity of eggs.

It will make turkeys, ducks, geese and pigeons thrive.

It will help moulting fowls and make them lay sooner.

It is used in over 30,000 towns in the United States; also in Canada, Europe and Africa.

Try it; if not on all your chickens, separate a few, and the astonishing results will make it profitable to use always.

PRICES:

2 6-oz. packages	\$0.25
4-lb. packages50
12-lb. pails	1.35

Feed it to the worst run-down fowl in your flock; the result will more than please you.

DIRECTIONS FOR FEEDING PRATT'S POULTRY FOOD.

For Young Chicks, Turkeys, Ducks, Geese and

Pigeons: Mix one ounce (two tablespoons) of Pratt's Poultry Food with the feed of 15 or 20 every other day.

For Large Chickens, Turkeys, Ducks and Geese: Mix one ounce Pratt's Poultry Food with the feed of 15 or 20 fowls every day. In case of disease, double the dose, or, should the fowl be unable to eat, make a gruel of Pratt's Poultry Food and pour it down the throat with a spoon.

Lee's Germozone

The cause of sickness and disease with poultry may be traced to a great many different sources: Improper food, improperly ventilated houses, filth, lice, etc. It is impossible to get good results from a flock of chickens that are sick, and it is seldom indeed that you find a poultry raiser who has not been troubled with sickness among his poultry.

LEE'S GERMOZONE is the best cure for diseases of poultry that there is manufactured. It will not only cure diseases but it will stop the progress of all contagious diseases and properly effect a cure. Roup, colds, cholera, canker, sorehead, etc., can be prevented or cured by a little Germozone in the drinking fountain. Chickens will take their own medicine. Germozone is the most profitable poultry preparation that has ever been offered to poultry raisers, because if it is given a little in the drinking water every day it will insure almost absolute freedom from disease. **Price, 50c per package.**

Conkey's Roup Cure

Conquers Roup



Roup is the most dreaded and fatal disease of the poultry yard.

The primary cause is a cold which may be contracted in various ways, such as exposure to cold rains, drafts, sudden changes in temperature, damp houses, etc.

THE SYMPTOMS.

Sneezing, followed by wheezy, difficult breathing. Discharge from the nostrils, which quickly hardens and becomes cheesy-looking; rattling in throat; fever and discoloration of the comb.

Conkey's Roup Cure is the only remedy that will absolutely and positively cure Roup in all its forms.

It not only cures, but will prevent colds and roup. It is used successfully on turkeys, and is unequalled for canker in pigeons.

Easily Administered. Simply put it in the drinking water and the fowl takes its own medicine.

IT IS NOT EXPENSIVE.

One 50-cent package makes 25 gallons of medicine, \$1.00 package 75 gallons of medicine. Sent postpaid.

Poultry Supplies—Continued

Conkey's Cholera Cure

When a fowl is attacked by cholera or indigestion of the more serious order there is a loss of appetite and a greatly increased thirst. Most of the "cholera cures" on the market are to be given in the soft food. Realizing the impossibility of medicating the fowl in this manner, because of its lack of appetite, and also the great inconvenience to the poultryman, we have put out CONKEY'S CHOLERA CURE in such form that it must be given in the drinking water. This preparation is entirely different from anything else which has ever been put out, and can be absolutely relied upon to be the most dependable Cholera Cure known. We have put into the compounding of this our best thought and efforts, and that insures its excellence. It is tasteless to the fowl, and will therefore be taken eagerly. It has a delightfully cooling effect on the hot and inflamed membranes of the fowl, and it reduces the fever throughout the bird's system. For the treatment of cholera, indigestion, bowel trouble, diarrhea, constipation, and kindred diseases in old and young, this remedy is invaluable. It should be kept on hand by everyone who raises little chicks, as it will keep them in sound condition if given occasionally in the drinking water. Give it a trial, and you will number it among your best friends. Remember we guarantee that it will satisfy you. **Price, 50 cents per box, postpaid.** Makes 25 gallons of medicine.

Lee's Lice Killer

**For LICE, MITES and INSECTS
Affecting Poultry and Stock**



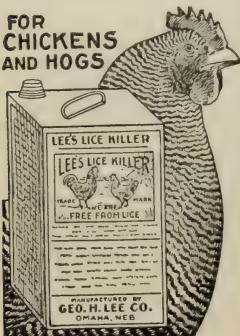
Lee's Lice Killer is a liquid preparation for destroying insects on chickens, hogs and other stock. It was especially designed for killing lice and mites on chickens and hogs without the necessity of handling, dipping, dusting or greasing the fowls or animals.

To secure this result it was necessary to prepare a fluid of strength sufficient so that the odor, gas or vapor given off by it would kill the insects without touching them with the fluid itself. At the same time it must be perfectly safe to handle and not injurious to fowls, animals or operator.

Lee's Lice Killer kills all body lice and mites on poultry and hogs by simply painting, sprinkling or spraying it on the roosts for poultry or on bedding for hogs. It forms a vapor or gas of the same weight as atmospheric air, which hovers about the bodies of the fowls or animals while they sleep, penetrating the hair or the feathers and killing all insects concealed therein. It does away with handling or disturbing the chickens or hogs, and the labor involved by such operation. You apply it in a few moments in the afternoon or early evening, and it works while they sleep. It is harmless to fowls and animals, but sure death to insects—not only by actual contact, but from the gas or vapor given off by it when exposed to the air.

It is strong, very strong, and in its strength is its great value, its economy of labor and thoroughness of results. It is perfectly safe to use as directed, but must be used with caution about young chicks, and must not be applied direct to the bodies of fowls or animals.

FOR CHICKENS AND HOGS



Try it thoroughly, test it in every way, and you will say with thousands of others, that it is the easiest to use, and the cheapest and best lice and mite destroyer in the world.

Lee's Lice Killer is not sold in bulk. Demand it always in original packages—yellow painted cans bearing name and trademark.

PRICES.

- 1-quart can\$.35
- 1-gallon can\$1.00
- ¼-gallon can60
- 5-gal. wood jacket can.. 4.00

A handy, convenient and economical way to apply Lee's Lice Killer is by using the Aspinwall Sprayer. It is strong, durable and the best pump on the market for the price.

Poultry Supplies—Continued

The Jubilee Incubators and Brooders



Wherever the Jubilee Incubators and Brooders are known they are used, and additional Jubilees are purchased to the exclusion of all others. A Jubilee once sold stays sold, and sells others. The more sold the more there are to sell. Every Jubilee sold gives satisfaction—it gives results greater than could be obtained with any other machine—it gives a profit where without it there would be no profit—it gives wonderful results under conditions that would render many machines absolutely worthless. They are made for all climates—they adapt themselves to all conditions—they are perfect “business” machines. They are to hatch eggs, any kind of eggs and in any climate, in any country—hen eggs, duck eggs, turkey eggs, pheasant eggs, ostrich eggs, any eggs, and it matters not whether at the equator or in Alaska, whether in a swamp or in a desert, whether at the sea level or at an altitude of miles. The Jubilee will **always** give maximum results.

We have endeavored to make the foregoing a strong statement. Every word of it is fact, not fiction. Our experience of over a quarter of a century, and the experience of thousands of customers convinces us absolutely that every word is fact. The Jubilees embody a perfect application of a right principle to solve each individual problem, problems that have puzzled practical poultrymen since artificial incubation became a fact, problems of heating, of ventilation, of regulation of moisture application, of nursery conveniences. It would be hard to imagine an incubator including a more perfect combination of right principles rightly applied, than the present Jubilees, and it would be unfair to expect greater results from incubation and brooding than the Jubilees are capable of.

If all buyers and users of Incubators and Brooders thoroughly understood the essentials of successful machines,—thoroughly understood just what they have a right to expect for their money,—there would be fewer failures. The beginner accepts everything a catalogue states as truth—he makes his investment and soon concludes that incubators are a fraud. **WHY?** The answer is easy and clear to a person who has studied the question. He certainly did not buy Jubilee machines, for had he done so we would have sold him more, or sold his neighbors, his brothers, his cousins,—would have sold them all Jubilee machines if they could possibly use one.

Now what are the necessities, the essentials, of a perfect incubator?

First.—It must have a perfect heater durably constructed, giving the maximum of heat with a minimum consumption of oil. It must be safe, reliable, and with a direct and uninterrupted draught. It should heat the egg chamber by means of radiation from hot water pipes—hot air is killing. Did you ever see a hot-house heated by hot air? **Why?**

Second.—It must have a perfect regulator; simply constructed, of good material, with its sensitiveness properly applied; unflinching in its vigilance and indestructible from long and continued use.

Third.—The egg chamber must be heated evenly and that heat properly applied and regulated. It must be scientifically ventilated, with a convenient and automatic method for application of moisture. Ventilation and moisture are necessities, no matter what “new process” manufacturers may say. We have experimented for 26 years and we **know**. It is reasonable, it is scientific, and it is right.

Poultry Supplies—Continued

Fourth.—It must have a perfect nursery,—a nursery that is a nursery and a successful nursery. Without ventilation a successful nursery is an impossibility.

When buying your incubators if you don't get all of these features included you are not getting your money's worth,—and the Jubilee Incubator is the only machine manufactured that can give you these features in the highest and most practical form. Ask us **why**. We will be glad to tell you. Our catalogue will explain it.

We give you an incubator as nearly perfect as human skill has succeeded in devising. The Jubilee is as far in advance of the ordinary incubator as an Ocean Liner is in advance of a sailing vessel. Would you travel on an ocean-going vessel that had not been improved in 20 years' time? You wouldn't feel safe, would you? Would you use an incubator that is made on the same plan used 20 years ago? You wouldn't feel safe, would you? The machines we made 10 years ago were the finest at that time, but the Jubilees of today are as far superior to the Jubilees of 10 years ago as the Elgin watch is superior to the Waterbury.

Bear these points in mind: **a few dollars difference in price will give a few hundred dollars difference in results.** If you don't buy a Jubilee now, but take a cheaper machine we will sell you a Jubilee after awhile when you have had your lesson. Perhaps the experience will lead you to give up the poultry business,—one of the most profitable businesses possible,—in that case we would not sell you a Jubilee later,—therefore we want you to buy one now,—then you will want more of them.

Our Incubators and brooders are "business" machines. They are made for wear and to give results. They are not playthings. They are just as essential to a farm or ranch as a cook stove is essential to the proper equipment of a kitchen. **You need them, you want them.** They will pay for themselves many times.

The Jubilee Incubator Co., Sunnyvale, California, the manufacturers of the Jubilee Incubators and brooders, issue a beautifully illustrated catalogue of the Jubilee goods. We shall be pleased to mail one of these catalogues to every one interested in poultry raising for profit, and we can assure our customers from our own personal knowledge that there is no incubator so good as the Jubilee. In Utah, the most difficult of all places for artificial incubation, the Jubilee will give splendid results where all others fail.

Send for Special Catalogue, and read of the success others have had with the Jubilees. We mail it free.

Price List

Jubilee Incubators and Brooders

F. O. B. SALT LAKE CITY, UTAH

Incubators

60-egg Jubilee Special	\$13.00
108-egg Jubilee Incubator, 110 lbs....	24.00
216-egg Jubilee Incubator, 150 lbs....	35.00
324-egg Jubilee Incubator, 200 lbs....	44.00
504-egg Jubilee Incubator, 260 lbs....	55.00

Sectional Out-Door Brooders.

1 section 75 chicks, 75 lbs.....	\$17.50
2 section 150 chicks, 130 lbs.....	22.50
3 section 225 chicks, 185 lbs.....	28.50

Sectional In-Door Brooders.

2 section 100 chicks, 100 lbs.....	\$17.50
3 section 150 chicks, 135 lbs.....	20.50
4 section 200 chicks, 170 lbs.....	23.00

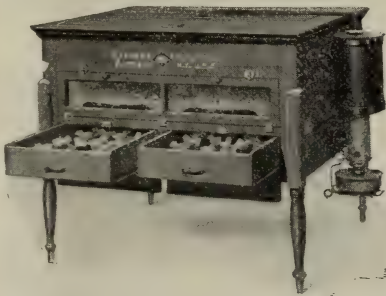
Poultry Supplies—Continued

We sell the

Genuine Cyphers Incubators

Free on Board Cars Salt Lake City, Utah,
at Money Saving Prices

The Genuine Standard Cyphers Incubators are not an experiment. They have been before the public eleven years, and have received the benefit of eleven years' improvements. Their fame has grown until they are now acknowledged to be the "World's Standard Hatchers."



1908 PATTERN STANDARD CYPHERS.

The Standard Cyphers Incubators are built strictly for business. From the moment the lumber is selected in the Michigan forests, where we purchase it by the shipload, until the finished machine leaves the hands of the varnisher, this one fact is borne in mind by our employes, and is closely followed through every succeeding operation by one or another of our factory foremen—each a trained expert in his department. The natural result of such close scrutiny of every detail, combined with our fixed determination to eliminate anything that might tend to lessen the value and reliability of these "Recognized Standard Hatchers of the World" is the construction of an incubator that we are able to guarantee to the fullest extent.

The Cyphers is a hot-air incubator and therefore does not possess a tin, galvanized iron or copper tank to rust out, spring a leak and water-soak the machine, thereby injuring or ruining the contents.

The improved...

Since issuing this catalogue the Cyphers Co. have found it necessary to advance their prices on Incubators and Brooders to cover increased cost in manufacture and advance in freight rates. Until further notice prices will be as follows;

No. 0	-	Incubator	-	-	\$18.00
No. 1	-	"	-	-	25.00
No. 2	-	"	-	-	35.00
No. 3	-	"	-	-	41.00
Style A 1909	Brooder	(Formerly Storm King)			\$16.00
Style B 1909	"	(" Style A)			20.00
Style C 1909	"	-	-	-	22.50
Style D 1909	"	-	-	-	14.50

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Poultry Supplies—Continued

Cyphers Unequaled Apartment Brooders

Free on Board Cars at Salt Lake City, Utah,
at Money-Saving Prices

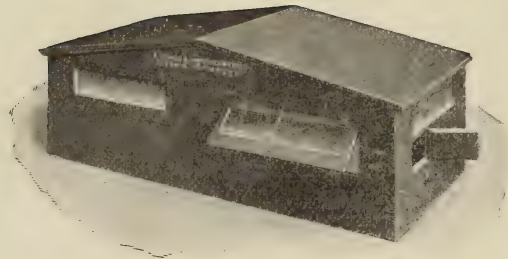
Cyphers Style "A" Out-Door Brooders

Briefly, the special merits of the Style A, Out-door Brooder, are:

First—It is rain-proof and storm-proof, having a heavy tin-covered roof over the hover chamber and the feeding apartment, or exercise room.

Second—It is fire-proof, being equipped with a Cyphers Insulated Brooder Lamp, the entire lower floor of the hover chamber being protected underneath by a solid sheet of galvanized iron, with an air space between it and the wooden floor.

Third—The fumes from the brooder stove cannot pass into either of the chick apartments, but are carried out at the sides of the brooder by an in-fallible device.



Cyphers Three-Apartment Out-Door Brooder, Style A, Price \$18.50.

Fourth—The surplus brooder lamp heat preserves all the lower wood work of the brooder, by warming and drying the soil underneath the brooder, thus making the brooder not only safer and more comfortable for the chicks, but also more lasting.

Fifth—The brooder lamp is easy of access, being above ground. The Cyphers Insulated Brooder Lamp combines a lamp proper with chimneyless burner, an insulated plate (which is also the lamp slide) and a galvanized plate which forms the lamp door. The wick rod extends to the outside of the lamp door and the height of the flame may be adjusted without opening the door. By use of the reflector attached to outside of lamp door the height of the flame may be observed by operator from an upright position. This lamp avoids the necessity of a water pan. The oil bowl (which is seamless) remains cool at all times, being protected from the radiated heat of the flame and burner by the insulating plate.

Sixth—This brooder need not be placed in a pit, nor need the ground be excavated for the brooder stove; hence a saving in labor and in the trouble thereafter of caring for the stove.

Seventh—When the temperature underneath the chick hover is at 90 degrees, we have a surrounding atmosphere of 80 to 85 degrees, while in front apartment the temperature will average several degrees lower. The chicks, therefore, may suit themselves, going to and from the heat at will.

Eighth—The cylinder chick guard prevents crowding of the chicks and also prevents their coming in contact with the heat dome or drum to their injury.

Ninth—In this brooder there are no stairs to climb, hence no danger of little chicks getting lost and becoming chilled while learning the way in and out.

Price, complete (with thermometer and lamp), \$18.50.

Poultry Supplies—Continued



Storm-King Out-Door Brooder and Roost Coop.

Recognizing the widespread demand for a thoroughly well made, practical brooder that can be sold at a lower price than our Standard Style "A" Brooder, we have devised and perfected the Storm-King Brooder. This is a combined brooder and colony coop. It has a floor space of **34x34** inches, and is 75-chick capacity. The heating principles employed in the Storm-King are the same as in the Style "A" Brooder, but adapted to meet the special requirements of this style of brooder. The entire floor space of this brooder, together with the lamp slide and other working parts, may be removed and roosts inserted, thus making a well lighted, well ventilated colony roosting coop.

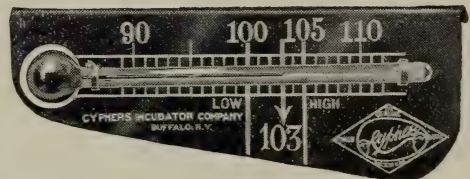
Price, complete (with thermometer and lamp), \$13.50.

High Grade Tested Thermometers

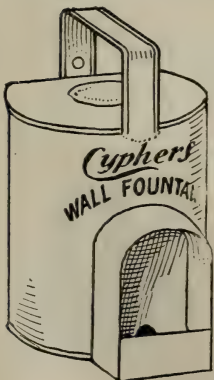
The best incubator or brooder manufactured is useless unless the thermometer used therein is accurate. Hundreds of hatches in incubators fail because of the inferior mometers, and large numbers of chickens are killed in brooders owing to defective or worthless thermometers. The operator, to be successful, must know the exact temperature in the egg chamber of the incubator, and be sure that the chickens in his brooder have the proper amount of heat. The thermometers here listed are manufactured especially for us, and are thoroughly tested before they are shipped.

Prices: Cyphers' Incubator Thermometers, each 60 cents, postpaid.

Cyphers' Style A or Storm-King Brooder Thermometers, each 50 cents, postpaid.



Cyphers Incubator Thermometer.



Cyphers Wall Fountains

These fountains are something new and extra serviceable in the way of poultry fountains. One side of the back is flattened so that it can be hung on the wall of a building, or against an upright post or board at any height. A galvanized iron hood projects over the water trough and protects the water from becoming soiled. These fountains are equally serviceable for young chicks or adult fowls and are especially useful for pigeons.

They are made of the best galvanized iron and guaranteed to last many years with proper treatment.

Prices: One-gallon size, each 60 cents.

Poultry Supplies—Continued

Cyphers Galvanized Iron Drinking Fountains



The water supply is often the medium that conveys contagious disease from one fowl to another. In the drinking vessel it comes in contact with and is infected by the discharges from the nostrils of rousy fowls and those having canker and chicken pox, and other head and throat diseases. It is essential, therefore, that the drinking fountain shall be not only a suitable vessel for holding water, but it should

also be easy to clean, and of such material and construction that it may be easily kept clean.

The Cyphers Fountains are made of heavy galvanized iron, all seams being carefully turned and soldered. They are so formed that in freezing weather the pressure of ice inside will not split the seams. Prices:

Small size, 1-quart (for chicks)	25 cents.
Medium size, 2-quart (for growing chicks or ducklings).....	35 cents.
Large size, 3½-quart (for fowls).....	45 cents.
Special duck size, 2 gallons	65 cents.

Cyphers Dry Food Hopper

An Economical and Sanitary Self-Feeding Device for Use With Dry Food.

Cyphers Dry-Food Hopper is a practical labor and food saving device for feeding dry grain food, either whole or ground. These hoppers are well made of heavy galvanized iron.

The Cyphers Dry-Food Hopper has two compartments, a large one for grain mixtures, holding about six quarts, and a small one for beef scrap, holding about three quarts. The trough of the hopper is high enough to prevent waste, and at the same time permit easy access to the food. The hopper is provided with a hinged cover, which protects the grain at all times from moisture and filth, and is also supplied with a strong handle for convenience in filling and handling. These hoppers are intended to be hung against the wall of a poultry house.

This method of feeding is a most economical and practical one. Those who are interested in dry feeding and desire to economize on the cost of grain and beef scrap, cannot afford to be without the Cyphers Dry-Food Hopper.

Price of Cyphers Dry-Food Hopper, 80 cents.



Cyphers Grit and Shell Box

Necessary on Every Well-Organized Poultry Plant.

Cyphers Sanitary Grit and Shell Boxes work a material saving in grit, oyster shell, ground bone, charcoal or poultry foods. They are thoroughly practical self-feeding boxes, well made out of heavy galvanized iron. This style of box is made with three compartments—for grit, oyster shell and charcoal. Like the dry food hopper, it is provided with a cover or lid, which protects the contents, and being placed at an angle furnishes a slanting top, preventing the fowls from roosting on the top of the box. Like the larger box, it is also provided with a strong handle by which it may be hung to the wall of the poultry building.

Price of Cyphers Sanitary Grit and Shell Box, 60 cents.

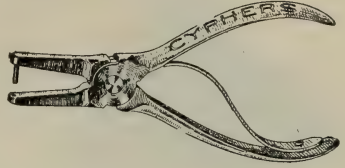


Poultry Supplies—Continued

Cyphers Perfect Marker

This punch is so simple in construction that it will appeal to all as a practical tool. Cyphers Perfect Marker is made especially for the work of marking chicks. It makes a good, clean cut, and does not mutilate the web, as do many cheaper punches. These punches are made expressly for us, and we guarantee them to meet all requirements.

Price, each, 50 cents.

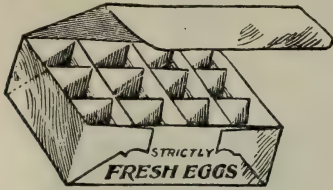


Paper Egg Boxes

Just the Thing for Your Family Egg Trade.

These boxes are intended for use in delivering eggs to private families. They are exceedingly neat in appearance and go a great way toward making satisfied customers. They ship "knocked down," can easily be set up and sent by express or freight at very low rates. The customer, after using contents, can take them apart and return them.

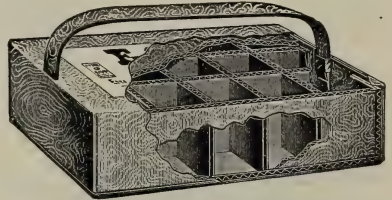
Prices: 1 doz. size, per doz. 20c; per 100 \$1.50; per 1,000 \$10.00.



Eyrie Egg Boxes

"The Eyrie Egg Box" is made for the purpose of shipping settings of high-class eggs, and is made from jute board, lined throughout and partitioned with double-faced corrugated paper, which incloses the eggs in a dead air space, effectually protecting them from sudden changes of temperature. The strength of a package thus constructed is the greatest that can be acquired with the least amount of weight in material used, and sufficient to protect the contents from any damage through handling. The cushioning effect of corrugated paper affords ample protection, and the partitions allow of a change in position of the germ. The **handle** is a very important feature. It serves to prevent the express agent from taking hold of the body of the box and pitching it around, since he will naturally take hold of the handle and pass it on. It further prevents the placing of other express packages on top of the box. The **automatic locking** of the box is accomplished by the insertion of the notched handle in two holes at the ends of the box, the tongue on the handle slipping into the metal catch which holds it firmly. To open the box it is necessary to cut off the handle. This is the only box ever made that cannot be tampered with. This lock cannot be picked, and the contents are safe from unscrupulous individuals who would molest the eggs. The time saved in packing the eggs in the Eyrie Box fully pays for the boxes. The strength of this box was recently tested by putting over 900 pounds weight on it, no damage resulting to it whatever.

Prices: No. 1 (holds 15 eggs), 20 cents; No. 2 (holds 30 eggs), 30 cents.



Cyphers X-Ray Egg Tester

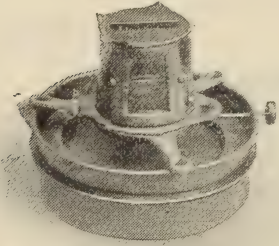
The Cyphers X-Ray Egg Tester is made of block tin and consists of a central cylinder or lamp flue $5\frac{1}{4}$ inches high, with an outside diameter of $2\frac{3}{8}$ inches at the base, and $2\frac{3}{8}$ inches at the top. It is designed for use on an ordinary hand lamp and fits over any style of burner with a diameter approximating that of the tester.

In a dark room the light will be found strong enough to penetrate the shell and illuminate the interior of the egg.

Price 35 cents each.



Poultry Supplies—Continued



Cyphers Safety Brooder Stoves

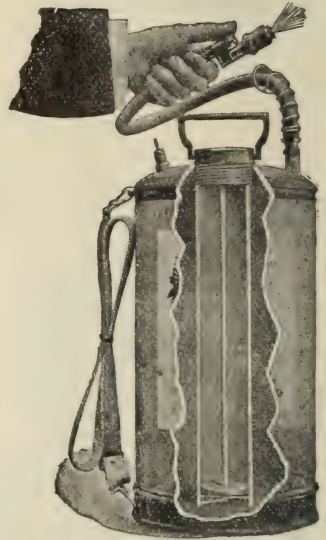
The Safety water-pan on the Cyphers Safety Brooder Stove holds nearly a quart of water, and extends out over the entire surface of the oil bowl, thus placing a sheet of cold water one inch to one and one-half inches in thickness between the oil bowl and the flame jets. By this arrangement all danger from the generation of explosive gases, arising from the top of the lamp, or the burner becoming heated, is removed. We have sold thousands of these to persons who build home-made brooders, and they give general satisfaction. Height, seven and one-half inches; greatest width, ten and one-half inches.

Price, \$2.00.

"Kant-Klog" Knapsack Compressed Air Sprayer

DESCRIPTION.—This Sprayer is made of heavy galvanized steel. Top and bottom are dome shaped; joined to body under heavy pressure, making a complete double seam. The body is supported and further strengthened by a heavy steel band around the bottom. When completed this body is tested under double the pressure formerly used, so enabling you to get a finer spray for a greater length of time than any other sprayer on the market.

"KANT-KLOG" Style G. Price \$5.00.



The Little Aspinwall



The Best and Most Effective Hand Sprayer on the Market

A Necessity in Every Household. Invaluable for Applying Liquid Lice Killer.

Great advantage is derived by the use of these sprayers in exterminating Potato Bugs, Tobacco, Tomato, Cabbage and Currant Worms, and all Plant Insects. Also in killing Lice and Mites in poultry houses.

They are used effectively on Horses, Cattle, and Swine, and for spraying Clothes, Carpets, Cigar Wrappers, etc.

Price 60 cents each.

Poultry Supplies—Continued



Banner Root Cutter No. 7

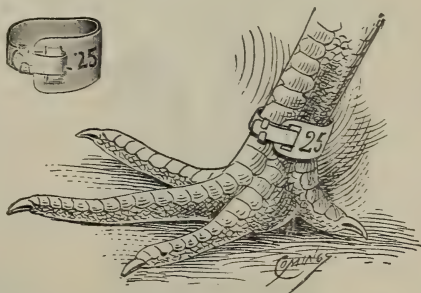
This is an illustration of the **Banner No. 7 Root and Vegetable Cutter**, a machine made expressly for poultry men. It quickly cuts vegetables into **long, round, ribbon-like slices** that resemble a bunch of **angle worms**, which fowls readily eat up to the last morsel. The value of this kind of food once or twice a day, as an **egg producer**, is unequalled. It also puts the fowls into a fine, healthy condition, acting as a gentle tonic and laxative. This machine will pay for itself in a short time. It is a valuable addition to the poultry house and is highly recommended by the best poultry experts in the country. **Price \$6.00.**

Improved Champion Leg Bands

The oldest and most popular Band on the market. This Band is made in one piece, in two sizes, adjustable to fit any fowl. They will stay where you put them. Held by double lock it is impossible for them to lose off. Made of aluminum or copper in two sizes, large size for Asiatic class and Turkeys; small size, Plymouth Rocks and all smaller breeds. Price, postpaid, **12, 15c; 25, 30c; 50, 50c; 100, 80c.**

DIRECTIONS.

Bend broad part of the Band on your finger to conform to shape of fowl's leg. Put small end through loop, draw through until it fits closely on the leg, turn the end back, then bend the two lugs over the loose end as shown in cut. Cut off surplus with shears.



Improved Smith Sealed Leg Bands

The Smith Sealed Leg Band makes positive identification of the banded bird possible. Smith's Sealed Leg Bands never come off when once fastened on and can never be taken off without destroying the band. These bands are numbered in lettered series of A1 to A10,000, B1 to B10,000, etc. No duplicate numbers are ever made.

Order by Number.—No. 1 bantams and small Mediterranean females, etc.; No. 2, ordinary Mediterranean and Pit Game females, etc.; No. 3, Mediterranean males, American females, Pit Game males and French females; No. 4, American males, medium Asiatic females, turkey hens, etc.; No. 5, ordinary large Asiatics and Tom Turks, etc.; No. 6, extra large Asiatics and very large Tom Turks, etc.

Prices: **12, 30c; 25, 50c; 60, \$1.00; 100, \$1.50.**

Sealer for sealing bands, plain, **50c.**

Poultry Supplies—Continued

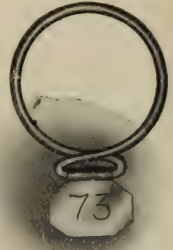
Climax Bands

The "Stay-On" Kind

These bands have been on the market for years, and have proved a most satisfactory device for marking poultry. They are especially desirable for marking birds with feathered legs, and are neat, simple and easy to put on, and absolutely secure if properly applied.

Rings are made of spring-brass and the tags of aluminum. They are numbered only from 1 to 100, except on special order.

Prices, postpaid: Per doz. 15c; per 25, 30c; per 50, 50c; per 100, 80c.



The "Triumph" Caponizing Set

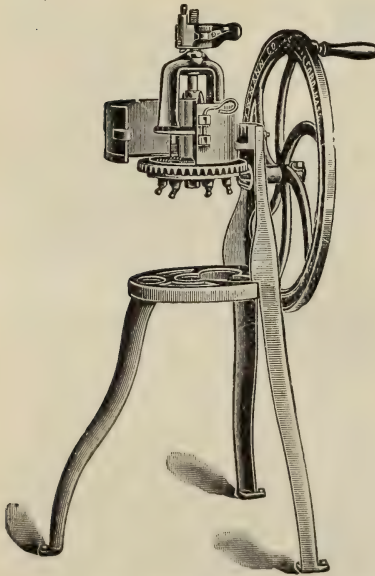


There is no doubt in the minds of up-to-date poultrymen as to the advantages of caponizing. The operation is very simple, and with a "Triumph Caponizing Set" any boy twelve years of age can perform it with safety and thoroughness. Capons, as anyone knows, sell on the market as a rule from five to eight cents per pound higher than any other chickens. The demand for capons is always good, is steadily growing, and at this time a better market is assured the producer in this field than any other. Now is the time to get into the caponizing business, and the first thing to start right is to buy a "Triumph Caponizing Set." No more efficient, simple or more easily operated set is being offered the craft today than the Triumph, and you will make no mistake by selecting the Triumph set.

PRICES
 Set in plush-lined, cloth-covered case.....\$3.00
 Set in polished hardwood box.....2.75
 Set in Japanese wood box.....2.50
 We pay transportation charges within the United States.

Mann's Model No. 7.

Easiest to Fill, Easiest to Clean, Easiest to Turn.
 Warranted Against Breakage, Guaranteed to Give Satisfaction. Simplest in Construction. Never Gets Out of Order.



We confidently recommend the **Mann Bone Cutter**, for we are certain that there is no better bone cutter manufactured. It was F. W. Mann who patented and introduced the **first green-bone cutter**, and he and his machines have done more to popularize the use of green bone in all parts of the world than all other manufacturers of bone-cutters combined. He has steadily improved the cutters bearing his name until to-day, they are practically perfect. His latest and most important addition to what was, apparently, a perfect machine, is the open hopper. This invention obviates the trouble heretofore experienced in cleaning closed-hopper types of bone-cutters.

Patented 1903 model No. 7 is equipped with automatic governing spring feed. Large, open-hinged cylinder, giving instant access to all working parts. Six special knives. Gear guard, anti-clog device. Heavy balance wheel, with adjustable handle, besides all the best features of the old-style machines. Weight, 107 pounds. Cylinder, 7¼ inches in diameter, 5¼ inches deep. Capacity one-half to one pound per minute.

Mann's 1903 Model Bone Cutter No. 7 for Flocks of 100 to 200 Hens. Price, \$15.00. Prices on other sizes quoted on request.

Poultry Supplies—Continued



The Humphrey Rapid Clover Cutter

A heavy, well finished machine to cut clover and alfalfa hay into pieces one-eighth inch and less. By the ingenious use of plates and screens all long stems are passed back to the cutters to be recut, so that the product is of even length and of a size that makes it the best prepared green food given to poultry. Forty cuts of the knife for each revolution of the hand wheel makes speedy work of clover cutting, and the heavy balance wheel makes easy work for the operator. The bed knife is double-edged, giving double the wear of any clover cutter on the market. The price of the Humphrey Rapid Clover Cutter is \$13.50 for the stand machine.

Shipping weight 108 pounds.

EGGS FOR HATCHING

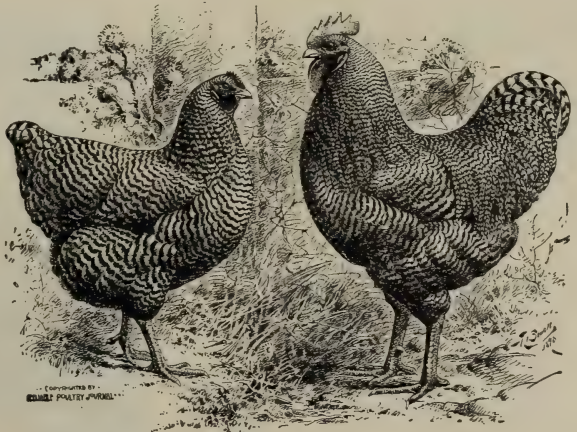
When you buy eggs for hatching, get the best. Eggs from good birds, properly mated and well cared for, will produce good chickens.

We guarantee all eggs fresh and true to name. We ship eggs by express only, and use the utmost care in packing, but cannot guarantee any number to hatch, as this depends on conditions over which we have no control. We have frequently sent eggs 500 to 1,000 miles, and had 12 out of 13 hatch. Stock for sale in season. Terms, cash with all orders.

Barred Plymouth Rocks

Weight medium to heavy. The color is blue gray or slate, with distinct bars. The fowl somewhat resembles the old Dominique in appearance and markings. Legs and skin yellow. Body plump, with full breast and clean legs. Excellent layers and good mothers, and unexcelled for market or table purposes. The meat is juicy and tender. Eggs, \$2.00 per 15.

White Rocks, same price.

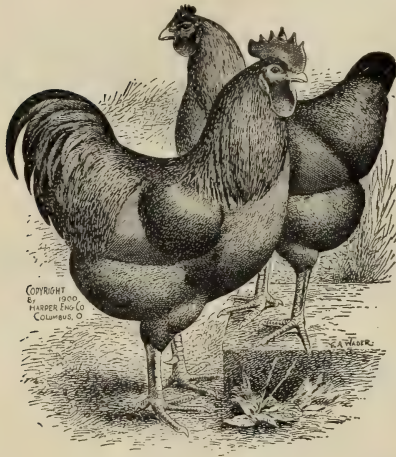
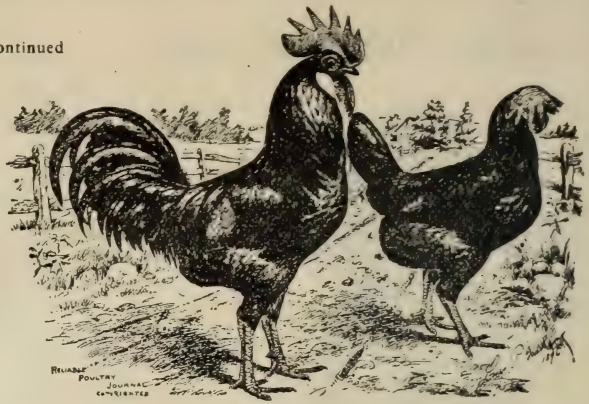


Eggs for Hatching—Continued

Black Minorcas

(Northrup Strain.)

The breed that lays the large white eggs and lots of them. Our birds have won all first and second prizes in the sharpest competition, wherever shown. Eggs \$2.00 per 15.



Rhode Island Reds

(Rose or Single Comb.)

This comparatively new breed is one of the hardiest. They lay large, deep-tinted eggs. The color is deep maroon, and they are really very handsome. Rhode Island Reds make peerless winter layers, and having been developed on the wet lowlands of Rhode Island, are peculiarly adapted to the country west of the Rocky Mountains, as little chicks are not affected by the rains of winter and early spring. They have deep yellow skin and legs, and no dark pin feathers, and make a good appearance when dressed for sale. They are absolutely without a superior as a farmer's fowl and for crossing upon common or mixed breeds. Eggs \$2.00 per setting of 15 eggs.

Brown Leghorns

(Single Comb.)

This strain of the celebrated Leghorn is absolutely without a superior. It is a famous forager, finding its own food to a great extent, and is unrivaled as an egg producer. Of admirable color and markings. Eggs, \$2.00 per 15.

White Leghorns

(Single Comb.)

This standard strain is active and industrious. A wonderful layer. Valued especially for the beauty of the pure white plumage. Eggs, \$2.00 per 15.

White Wyandottes

This breed is equally as handsome and desirable as the White Plymouth Rock, and probably surpasses that sort in egg production. It is of medium to heavy weight. It makes a fine fowl for home or market purposes, being of a plump appearance when dressed. Eggs of medium size, and tinted. Eggs, \$2.00 per 15.



How and When to Spray

PLANT	1st Application.	2nd Application	3rd Application	4th Application	5th Application
Apple (Cankerworm, codling moth and bud moth scabs).	Spray before buds start, using copper sulphate solution.	After blossoms have formed, but before open Bordeaux and Paris green.	Within a week after blossoms have fallen, Bordeaux and Paris green.	10 to 14 days later repeat.	10 to 15 days later Bordeaux or weak copper sulphate.
Bean (Anthracnose)	When blossoms appear, spray with Bordeaux.	10 days later repeat.	10 to 14 days later weak copper sulphate solution.	Repeat last if necessary.	
Cabbage (Worms, aphid)	When worms first appear spray with kerosene emulsion or Paris green.	If worms or aphides are present, repeat if plants are not heading, using emulsion for aphid.	If aphides persist or if worms reappear use kerosene emulsion if plants are not heading.	After heads form use salt-petre for worms, teaspoonful to a gallon of water emulsion for aphides.	Repeat if necessary.
Carnation (Rust and other fungous diseases).	When planted out dip in Bordeaux.	7 to 12 days later spray plants with Bordeaux.	Repeat at intervals of a week or ten days until blossoms open.	In bloom spray weekly with diluted copper sulphate solution.	
Cherry (Rot, aphid, curculio and slug)	Before buds start use copper sulphate solution. For aphid, kerosene emulsion.	When fruit has set Bordeaux and Paris green.	10 to 12 days later if signs of rot appear repeat.	10 to 12 days later copper sulphate solution, weak.	Repeat if necessary.
Currant (Worms, mildew).	For, soon as worms are seen Paris green.	If they reappear repeat, adding Bordeaux for Mildew.	If worms still trouble pyrethrum or hellebore.**		
Gooseberry (Worms, mildew).	As leaves open, Bordeaux and Paris green.	In 10 to 14 days repeat with both.	10 to 14 days later sulphide potassium on English varieties.	10 to 14 days later repeat if necessary.	If mildew persists after crop is gathered, Bordeaux.
Grape (Flea-beetle, fungous diseases).	Before buds burst, copper sulphate solution and Paris green.	When first leaves are half grown, Bordeaux and Paris green.	As soon as fruit has set repeat.	10 to 14 days later Bordeaux mixture if disease is present.	If necessary very weak copper sulphate solution.
Nursery Stock (Fungous diseases).	When buds burst Bordeaux.	Repeat at intervals.	10 to 14 days later repeat.		
Peach, Apricot (Leaf curl, curculio, mildew, and rot).	Before buds swell copper sulphate solution.	As soon as fruit has set Bordeaux and Paris green.	10 to 12 days later repeat.	10 to 12 days later repeat.	If rot persists use very weak copper sulphate every 5 to 7 days.**
Pear (Leaf blight, scab, psylla and codling moth).	Before buds start copper sulphate solution.	Within a week after blossoms fall, Bordeaux and Paris green.	10 to 12 days later repeat.	10 to 16 days later Bordeaux.	10 to 16 days later Bordeaux.
Plum (Black knot, rot and all fungous diseases, curculio).	As buds start copper sulphate solution. Cut out knot and burn.	When fruit has set, Bordeaux and Paris green.	10 to 12 days later repeat.	10 to 20 days later Bordeaux.	Weak copper sulphate solution if necessary.
Potato (Beetles scab, blight).	For Scab soak seed in Corrosive Sublimate, (2 ozs. in 13 gallons of water for 90 minutes.)	When beetles or their larvae appear, Paris green, (1 lb. to 100 lbs. of plaster.	Repeat whenever necessary.	When blight of the leaves is accompanied by rot of the tubers, Bordeaux.	Repeat if necessary.
Quince (Leaf and fruit spot rot).	Before buds start copper sulphate solution.	When fruit has set Bordeaux and Paris green*.	10 to 12 days later repeat.	10 to 20 days later Bordeaux.	Bordeaux or copper sulphate solution as is necessary.

How and When to Spray—Continued

PLANT	1st Application.	2nd Application	3rd Application	4th Application	5th Application
Raspberry, Blackberry (Anthracnose, rust.)	Cut out badly diseased canes. Spray with copper sulphate solution before growth starts.	When new canes are 1 foot high, spray with Bordeaux mixture.	10 to 14 days later weak copper sulphate solution.	When crop is gathered, remove old canes, thin new ones and spray with Bordeaux mixture.	Special Notes. For black knot on cherries and plums cut out and destroy by burning diseased parts as soon as discovered.
Rose (Mildew, black spotted spider, aphid.)	Mildew: Keep heating pipes painted with equal parts of lime and sulphur mixed with water to a paste.	Black Spot: Spray plants once a week with weak copper sulphate.	Red Spider: Kerosene emulsion to underside of foliage.	Aphis, kerosene emulsion.	For aphid on all plants use kerosene emulsion.
Strawberry (Rust.)	Just before blossoms open Bordeaux and Paris green.	When fruit has set Bordeaux or weak copper sulphate solution.	As soon as berries are harvested Bordeaux. (If to be kept longer.)		If Red Rust appears the entire stools affected should be cut out and burned.
Tomato (Rot, blight, worms)	When first fruits are set Bordeaux.	If disease appears, repeat or use weak copper sulphate solution.	If necessary spray with weak copper sulphate solution.		Young Plants should be sprayed with Bordeaux mixture at time of 1st and 3d application to bearing plants.
Violet (Blight red spider.)	When blight is first seen weak copper sulphate. Kerosene emulsion for insects.	Repeat at intervals of 10 to 20 days, as necessary for blight.	Note —Use kerosene emulsion very weak.		

EXPLANATION.—Whenever the asterisk (*) is used it cautions against spraying with poisons while the plants are in blossom; two stars (**) indicate there is danger of making an application within three weeks of the time the fruit is to be used as food. While the number of applications recommended will be found desirable, in seasons when the fungi are less troublesome a smaller number may often suffice.

FUNGICIDES.

Copper Sulphate Solution.

Copper Sulphate1 pound
Water25 gallons

For use only before the buds open. It is ready for use as soon as dissolved in water.

Bordeaux Mixture.

Copper Sulphate4 pounds
Quick Lime4 pounds
Paris Green, for leaf-eating insects..4 ounces

Water (one barrel)40 to 50 gallons
To prevent potato rot, six pounds of copper sulphate is used instead of four.

Ammoniacal Copper Carbonate.

Copper Carbonate5 ounces
Ammonia2 quarts
Water (one barrel)40 to 50 gallons

For use late in the season, when Bordeaux mixture may stain the fruit. It is also best adapted for green-house spraying.

INSECTICIDES.

Kerosene Emulsion

Kerosene (coal oil)2 gallons
Rain water1 gallon
Soap½ pound

To be diluted before use with nine parts of water. For sucking insects.

Paris Green and Water.

Paris Green1 pound
Lime, fresh1 pound
Water200 gallons
For insects which eat foliage.

REFERENCE TABLES

Number of Plants or Trees to the Acre at Given Distances

Dis. Apart Inches.	No. Plants.	Dis. Apart Inches.	No. Plants.	Dis. Apart Inches.	No. Plants.	Dis. Apart Feet.	No. Plants.
12x 1	522,720	24x24	10,890	36x36	4,840	60x60 (inches)	1,743
12x 3	174,240	30x 1	209,088	42x12	12,446	8x 1	5,445
12x12	43,560	30x 6	34,848	42x24	6,223	8x 3	1,815
16x 1	392,040	30x12	17,424	42x36	4,148	8x 8	680
18x 1	348,480	30x16	13,068	48x12	10,890	10x 1	4,356
18x 3	116,160	30x20	10,454	48x18	7,790	10x 6	726
18x12	29,040	30x24	8,712	48x24	5,445	10x10	435
18x18	19,360	30x30	6,970	48x30	4,356	12x 1	3,630
20x 1	313,635	36x 3	58,080	48x36	3,630	12x 5	736
20x20	15,681	36x12	14,520	48x48	2,723	12x12	302
24x 1	261,360	36x18	9,680	60x36	2,901	16x 1	2,722
24x18	15,520	36x24	7,260	60x48	2,178	16x16	170

Quantity of Seed Requisite to Produce a Given Number of Plants and Sow an Acre

	Quantity per acre		Quantity per acre
Artichoke, 1 oz to 500 plants...	6 ozs	Grass, Sheep's Fescue, Wood	25 to 30 lbs
Asparagus, 1 oz to 800 plants...	1 lb	" Meadow	20 to 25 "
Asparagus Roots	1000 to 7250	" Italian Rye	20 to 25 "
Barley	100 to 120 lbs	" English, or Perennial Rye	20 to 25 "
Beans, dwarf, 1 lb to every 100 ft of drill	60 to 90 "	" Orchard, Fowl Meadow...	25 to 30 "
Beans, pole, 1 lb to 100 hills...	30 to 40 "	" Red Top, Chaff Seed...	25 to 40 "
Beet, garden, 1 oz to 100 ft of drill	7 "	" Timothy	10 to 12 "
Beet, Mangel, 1 oz to 100 ft of drill	5 "	Hemp, for seed	5 to 8 "
Brocoli, 1 oz to 5000 plants...	2 ozs	Hemp, for fibre	40 to 50 "
Broom Corn	6 to 8 lbs.	Horse Radish, roots	10000 to 15000
Brussels Sprouts, 1 oz to 5000 plants	2 ozs	Kale, 1 oz to 5000 plants...	2 ozs
Buckwheat	25 to 30 lbs	Kohl Rabi, ½ oz to 100 feet of drill	4 lbs
Cabbage, 1 oz to 5000 plants...	2 ozs	Leek, ½ oz. to 100 feet of drill...	4 "
Carrots, ½ oz to 10 feet of drill	2½ lbs	Lettuce, ½ oz to 100 feet of drill	3 "
Cauliflower, 1 oz to 5000 plants	2½ ozs	Martynia, 1 oz to 100 feet of drill	5 "
Celery, 1 oz to 15,000 plants...	2 ozs	Melon, Musk, 1 oz to 100 hills...	1 to 3 "
Chicory	2 to 4 lbs	Melon, Water, 4 ozs to 100 hills...	2 to 4 "
Clover, Alsyke and White Dutch	6 to 8 "	Nasturtium, 2 ozs to 100 feet of drill	15 "
" Alfalfa, or Lucerne	20 to 25 "	Oats	60 to 75 "
" Crimson, or Scarlet	12 to 15 "	Okra, 1 oz to 100 feet of drill...	8 "
" Large Red and Medium	12 to 15 "	Onion Seed, ½ oz to 100 feet of drill	4 to 5 "
" Esparsette, or Sainfoin...	30 "	Onion Seed, for sets	40 to 50 "
Collards, 1 oz to 5000 plants...	2 ozs	Onion Sets, 1 lb to 20 feet of drill	250 to 300 "
Corn, Pop	4 to 6 lbs	Parsnip, ½ oz to 100 feet of drill	3 "
" Sweet, ¼ lb to 10 hills...	8 to 10 "	Parsley, ½ oz to 100 feet of drill	3 "
" Jerusalem, in drills...	4 to 5 "	Peas, Garden, 1 lb to 100 feet of drill	60 to 90 "
" Jerusalem, for fodder...	40 to 50 "	Peas, Field	100 to 120 "
" Field, in hills	8 to 10 "	Pepper, 1 oz to 1500 plants...	3 ozs
" Kaffir, in drills	4 to 5 "	Potatoes, cut tubers	400 to 600 lbs
" Kaffir, for fodder	40 to 50 "	Pumpkins, 3 ozs to 100 hills...	2 to 4 "
Cress, 1 oz to 100 feet of drill...	12 "	Radish, 1 oz to 100 feet of drill...	10 to 12 "
Cucumber, 1 oz to 100 hills...	1 to 3 "	Rye	80 to 100 "
Egg Plant, 1 oz to 2000 plants...	4 ozs	Salsify, 1 oz to 100 feet of drill...	8 "
Endive, ½ oz to 100 feet of drill	4 lbs	Spinage, 1 oz to 100 feet of drill	8 "
Flax, broadcast	30 to 40 "	Spurry	15 "
Garlic, bulbs, 1 lb to 100 ft of drill	4 lbs	Sugar Cane, in drills	5 to 6 "
Gourd, 2 oz to 100 hills	4 lbs	Sugar Cane, broadcast	40 to 50 "
Grass, Kentucky Blue, for lawas, 1 lb to 200 square feet...	25 to 30 lbs	Savory, Summer, 1 pkt to 100 feet of drill	¾ "
" Kentucky Blue, for pasture	25 to 30 lbs	Sunflower, Mammoth Russian...	8 "
" Meadow Fescue, or English Blue	20 to 25 "	Squash, Summer, 4 ozs to 100 hills	2 "
" Hungarian and Millet	25 to 30 "	Squash, Winter, 8 ozs to 100 hills	2 "
" Mixed Lawn	70 to 80 "	Tomato, 1 oz to 4500 plants...	1 oz
" Red Top, fancy clean, solid	8 to 10 "	Tobacco, 1 oz to 5000 plants...	2 "
" Bromus Inermis	25 to 30 "	Turnip, 1 oz to 250 feet of drill...	1 to 3 lbs
		Vetches	100 to 120 "
		Wheat	80 to 100 "

Number of Pounds to the Bushel Legal Weight in Different States

ARTICLES.	Arkansas	California	Connecticut	Georgia	Illinois	Indiana	Iowa	Kansas	Kentucky	Maine	Massachusetts	Michigan	Minnesota	Missouri	New Hampshire	New Jersey	New York	North Carolina	Ohio	Pennsylvania	Rhode Island	South Carolina	Tennessee	Vermont	Virginia	Wisconsin
Apples, Green				50																					57	
Apples, Ripe				48								48														48
Apples, Dried	24			24	24	25	24	24	24			22	28													28
Apricots				60																			26	26		28
Barley	48	50	48	47	48	48	48	48	47	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48	48
Beans, Castor				46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46
Beans, White	60		60	60	60	60	60	60	60	64		60		60	60	60	62		60		60	60	60	60	60	60
Beets				60															56			60	60	60	60	50
Bran				20	20	20	20					20		20		20		20		30						20
Broom Corn Seed				46	46	46	46					46		46		46		40		30						46
Buckwheat	52	40	48	52	52	50	52	50	55	48	48	48	42	52		50	48	50	50	48		56	50	46	52	50
Canary Seed				60								60														
Carrots				55	50														50							50
Charcoal				80	82	82	82					82		82		82										82
Coal, Anthracite	80			80	80		80	80	76					80												80
Coke				40															40							
Clover Seed	60			60	60	60	60	60	60			60	60	60		64	60	64	60	62		60	60	60	60	
Clover, Esparssette				25								25														
Corn, on the cob	70			70	70	68	70	70	70			70							70				70	70	70	70
Corn, Shelled		52	56	56	56	56	56	56	55	56	50	56	56	56	56	56	56	54	60	56	56	56	56	52	56	56
Corn Meal	50		50	48	48	50		50	50	50	50	50	50	50	50	50	50	46	50	50	50	50	50	50	50	
Corn, Jerusalem & Kaffir				50								50														
Cranberries				33	33							40														
Flaxseed	56			56	56	56	56	54	56			56	56	56	55	55	55	56				44	56		56	56
Grass Seed, Hungarian				48					48			50		48		48		50								48
Grass Seed, Kentucky																										
Blue	14			14	14	14	14	14	14			14		14		15						14	14		14	
Grass Seed, Millet				50	50	48						50		50				50								50
Grass Seed, Orchard				14	14	14						14		14		14		14								
Grass Seed, Red Top,																										
Chaff Seed				14	14	14						14		14		14		14								14
Grass Seed, Timothy	45			45	45	45	45	45	45			45		45		44		45					45	45	45	45
Hemp Seed				44	44	44	44					44		44		44		44		44						44
Hickory Nuts				50																						
Lime, Unslacked				30																						
Lupins, Field				60																						
Malt, Barley				38	38	36						38		38				34		34						34
Middlings, Coarse				30	30																					
Middlings, Fine				40	40																					
Nectarines				60																						
Oats	32	32	32	32	32	32	32	32	32	30	32	32	32	32	32	30	32	32	32	32	32	32	32	32	32	32
Onions	57		50	57	57	48	57	57	57	52	52	54		57		57		50		50	57	56	52	57	50	
Onions, Sets				32																						
Onions, Top Sets				28	28	28						28		28		28		25								28
Osage Orange				33																						
Parsnips				55	55									44												
Peaches				60																						
Peaches, Dried, Pared				40	33	33						28		33		32		33								28
Peach Pits				48																						
Pears				60																						
Peas, Smooth, Dried				60	60	60						60		60		60		60		60					60	
Peas, Wrinkled, Dried				56	56	56						56		56		56		56		56					56	
Peas, in Pods, Green				32																						
Peanuts				22																						
Plums				60																						
Pop Corn				70	70																					
Potatoes, Irish	60		60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
Potatoes, Sweet	50		55	55	56	56	50	55			56	56		56		54	55		50		50	50		56	55	
Prunes				60																						
Quicklime				80	80	80						80		80				80								80
Quinces				56																						
Rape				50																						
Rye	56	54	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56
Sugar Cane Seed				50																						
Sunflower Seed				24																						
Tomatoes				60																						
Turnips			50	55	55		55	60	50			58		50										60	55	56
Vetches or Tares				60																						
Wheat	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60

FOREIGN NAMES OF VEGETABLES AND HERBS.

ENGLISH	GERMAN	FRENCH	SPANISH	ITALIAN	DUTCH
Anise	Anis, Gruner Anis	Anis	Anis, Matala- huga	Aniso, Anacio ..	Anijs.
Artichoke	Artischoke	Artichaut	Aicachola	Artiocca	Artisjok.
Asparagus	Spargel	Asperge	Esparrago	Sparagio	Asperge.
Balm	Citronen-Melisse	Melisse citron- ella	Toronji, Citro- nella	Melissa	Citroen-Milisse
Basil	Basilikum	Basilic grand	Albaca	Basilico	Basilicum.
Beans	Bohnen	Haricots	Habichuela	Fagioli	Boonen.
Beet	Rube	Betterave	Remolacha	Barbabetola	Bieten.
Borage	Boretsch	Bourrache	Borraja	Boragine	Bernagie.
Brocoli	Spargelkohl	Chou Brocoli	Broccoli	Brocoli	Broccoli.
Brussels Sprouts	Rosenkohl	Chou de Brux- elles	Bretones de Bruselas	Cavolo di Brus- selles	Spruitkool. Sluitkool.
Cabbage	Kopfkohl, Kraut	Chou pomme	Col repello	Covolo cappuccio	
Cabbage, Savoy	Wirsing	Chou de Milan	Col de Milan	Cavolo di Milano	Savooiekool.
Caraway	Feld-Kummel	Cumin des pres	Comino	Carvi	Karwij.
Carrot	Carotten, Mohren	Carotte	Zanahoria	Carota	Wortelen.
Cauliflower	Blumenkohl	Chou-fleur	Coliflor	Cavolfiore	Bloemkool.
Celery	Sellerie	Celeri	Apio	Sedano	Selderij.
Celeriac	Knoll-Sellerie	Celeri-rave	Apio-nabo	Sedano rapa	Knolselderij.
Chervil	Kerbel	Cerfeuil	Perifollo	Cer oglio	Kerbel.
Chicory	Cichorienwurzel	Chicoree sau- vage	Achicoria	Cicoria selvatica	Suikerij. Koriander.
Coriander	Coriander	Coriandre	Culantro	Corianderlo	
Corn Salad	Feldsalat	Mache	Canonigos	Valeriana	Veldsla.
Corn	Mais	Mais	Matz	Mais	Mais.
Cress	Garten-Kresse	Cresson aleonis	Mastuerzo	Agretto	Tuinkers.
Cress, Water	Brunnenkresse	Cresson de fon- taine	Berro	Nasturzio aqua- tico	Waterkers.
Cucumber*	Gurken	Concombre	Cohombro	Cetriolo	Komkommer.
Dandelion	Lowenzahn	Pissenlit	Diente de leon	Dente di leone	Molsla.
Dill	Dill	Aneth	Eneldo	Aneto	Dille.
Egg Plant	Eierpflanze	Aubergine	Berengena	Petonciano	Malanzaan- plant.
Endive	Endivien	Chicoree	Endive	Indivia	Aniljvie. Venkel.
Fennel	Fenchel	Fenouil	Hinojo	Finocchio	Venkel.
Garlic	Knoblauch	Ail	Ajo	Aglio	Knoflook.
Horse Radish	Meer Rettig	Raifort Sauvage	Faramago	Rafano	Feperwortel.
Hyssop	Isop	Hyssope	Hisopo	Issopo	Hyssop.
Kale	Blatterkohl	Chou-vert	Breton, Berza	Cavolo verde	Boerenkool.
Kohl Rabi	Knollkohl	Chou-rave	Col rabano	Covolo rapa	Koolrabi.
Lavender	Lavendel	Lavende	Espiego	Lavanda	Lavendel.
Leek	Porree, Lauch	Poireau	Puerro	Porro	Prei.
Lettuce	Lattich, Kopf- salat	Laitue	Lechuga	Lattuga	Kropsla.
Marjoram	Majoran	Marjolaine	Mejorana	Magglorana	Marjolijn.
Melon	Melone	Melon	Melon	Fopone	Meloen.
Melon, Water	Wasser-Melone	Melon d'eau	Sandia	Melone d'acqua	Water Meloen.
Mushroom	Schwamm	Champignon	Seta	Fungo pratajolo	Kampfernoelle.
Nasturtium	Kapuciner Kress	Capucine	Capuchina	Nasturzio	Capucine-kers.
Okra	Ocher	Gombaud	Gombo	Oera	
Onion	Zwiebel	Ognon	Ceboilla	Cipollo	Uien.
Parsley	Petersilie	Persil	Perejil	Prezzemolo	Peterselie.
Parsnip	Pastinake	Panais	Chirivia	Pastinaca	Pinksternakel.
Peas	Erbsen	Pois	Guisante	Pisello	Erwten.
Pepper	Pfeffer	Piment	Pimiento	Peperone	Spaansche Peper.
Pumpkin	Melonen-Kur- biss	Potiron	Calabaza tota- nera	Zucca	Pompoen.
Radish	Radies	Radis	Rabanito	Ravanello	Radijs.
Rhubarb	Rhabarber	Rhubarbe	Ruibarbo	Rabarbaro	Rabarber.
Rosemary	Rosmarin	Romarin	Romero	Rosmarino	Rozemarijn.
Rue	Raute	Rue	Ruda		Wijnruit.
Saffron	Safran	Safran	Azafran	Zafferano	Saffraan.
Sage	Salbel	Sauge	Salvia	Salvia	Salie.
Salsify	Haferwurzel	Salsifis	Salsifi blanco	Sassefrica	Salsefy.
Sorrel	Sauerampfer	Oseille	Acedera	Acetosa	Zuring.
Summer Savory	Bohnenkraut	Sarriette annu- elle	Ajedrea comun	Santoreggia	Boonenkruid.
Spinage	Spinat	Epinard	Espinaca	Spinace	Spinazie.
Squash	Kurbiss	Courge	Calabaza	Zucca	Kalebas.
Tansy	Gemeiner Rain- farn	Tanaisie	Tanaceto	Atanasia	Wormkruid.
Thyme	Thymian	Thym	Tomillo	Timo	Tijm.
Tomato	Liebesapfel	Pomme d'Amour	Tomate	Pomo d'oro	Tomaat.
Turnip	Weisse-Rube	Navet	Nabo	Navone	Rapen.
Wormwood	Wermuth	Absinthe	Ajenjo	Assenzio	Alsem.



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