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UASMTHRRUR \& Cos

Descriptive Catalogue

SEEDS.
T
FOR THE LAWN,
FOR THE FARM, FOR THE NURSERY. oho St. New York.
SCALE OF Shipped from New York. and a-half ponnds or less, and ONE CENT for each additional
CENTS IF PREPAID; otherwise it would cost EIGHTY CENTS.


## Annual Catalogue / or Jas. M. Thorburn (Lue ${ }^{13}$ SEEDS.

IN ISSUING our goth Annual Catalogue we would observe that our leading business principle has always been to supply only the very highest class of seeds, and the fact that we have commanded the leading wholesale and market gardeners' trade of this country for nearly a century should justify our claim to the patronage of those who have not yet experienced the advantage of dealing with us.

We would call attention to the descriptions and dírections given in this catalogue concerning each variety of seeds and their culture. They are as full and explicit as the limited space of a catalogue will admit, and worthy of constant reference and study. The directions are derived from years of experience, and aim to meet the requirements of soil, climate and culture in and around New York. For more northern or southern localities, changes in the time of sowing, etc., are, of course, necessary, and will readily suggest themselves to gardeners.

Whenever our Customers desire it, we will select an assortment of seasonable seeds, suited to their wants. All such orders will receive especial care and attention. The only information we require is the size of the garden and the sum proposed to be expended for seeds. We would advise making an early test of seeds, by sowing some of each variety in a flower pot, and keeping them warm and well watered.

Write Orders upon a blank sheet, separate from letter. Orders from new customers should be accompanied by a Post Office Money Order, if convenient, or bank-bills, if the amount enclosed is not large. Address always, J. M. Thorburn \& Co., i 5 John Street, New York.

PRICES.-The prices quoted are those ruling at this date, and do not include free transit, except for flower seeds in packets. Please add for prepayment of postage or express as below noted. All ordinary sorts of seed can be had in five-cent papers.

Seeds by Mail or Express. - 8 cents per pound should be added for prepayment of postage, if wanted by mail. Charges by express are not uniform, rates depending on distance and locality ; see table of express tariff on second page of cover. Except for small parcels, and to remote parts, the express companies will be found the most economical mode of conveyance ; of course we shall always adopt that mode which costs the least. Neither have we charged for a guarantee of safe arrival by mail ; it is rare, however, that seeds fail to reach their destination safely in that way.

It is very important that our customers send in their orders immediately on receipt of this catalogue, instead of waiting till the time when they wish to sow the seed; and to save time, seeds may be ordered by the numbers in the first column, if desired.

Name, Address, etc.-We beg our correspondents to give us very exactly, on each of their orders, their name and address; also to indicate very precisely the means of carriage which they prefer, whether by express, freight or mail, and the office or railroad station which best serves their locality. In case these directions are not followed out, or if they are not sufficient, we will choose ourselves the most advantageous and convenient means, but entirely at the risk of the customer, avoiding ourselves all responsibility.

SHIPMENTS by Express, "C. O. D."-Unless otherwise instructed, we shall send all such goods as go by express C. O. D. Orders from unknown customers not desiring this mode of carriage should be accompanied by the cash.

WARRANTIES.-Seeds of the best possible quality will fail through improper treatment. Thus, if a small seed be sown so deep that the young plant cannot reach the surface, the seed, however good, will fail. More failures result from a want of proper knowledge of conditions necessary to germination than from bad quality of seeds themselves. These conditions are : a proper temperature, sufficient moisture, and free access of air ; besides these, the soil must be in proper condition, and present no physical obstacle to the growth of the young plant. If heavy rains have compacted the surface of the soil, and the sun has baked it to a hard crust, it will be impossible, even if all other conditions are favorable, for the seedling plants to force their way through it, and many perish from this cause alone. Seeds differ greatly as to the temperature required for germination. Beets, Cress, Peas, etc., germinate readily at a temperature of $45^{\circ}$; but if Melons and other seeds of that family, bush or pole Beans, and other plants of sub-tropical origin, are sown under the same conditions, they will be apt to decay, as for their prompt germination they require a heat of at least $60^{\circ}$. From this reason many seeds fail yearly from too early sowing. The second condition, proper moisture, is likely to be violated by an excess rather than by too little moisture. The proper amount is that which a well-drained soil will naturally hold. Free access of air is all important, and this is interfered with by an excess of water in the soil. In germination complex chemical changes take place in the seeds, in which the air performs an important part. A portion of the seed is consumed, carbonic acid gas being given off, in changing the starch and other constituents of the seed into nutriment to forward the growth of the germ or embryo plant, which depends upon the contents of the seed until it has formed roots below ground and leaves above, and is able to sustain itself. Besides these conditions affecting the germination of the seed, the young plants, after they have made their way to the surface, are liable to various accidents; a sudden current of very cold air, or a continued drying wind, may check their growth, or destroy the young plants altogether ; besides these, there are numerous insects, both below and above ground, that may attack the plants, some of these being so small that they often destroy a crop before they are discovered.

For the above reasons, we wish to state in this explicit form, that, while we exercise great care to have all Seeds pure, reliable, and true to name, our Seeds are sold without any warranty, expressed or implied, and without any responsibility in respect to the crop. If our Seeds are not accepted on these terms, they must be returned at once.

JAMES M. THORBURN, \}
F. W. BRUGGERHOF. $\}$

# JAMES M. THORBURN \& CO., 

15 John Street, New York.
In February we publish a list of Gladiolus and Spring Bulbs, and in September a catalogue of Dutch Bulbous Roots.

## DIRECTIONS FOR THE CULTIVATION OF VEGETABLES.

To secure a good crop of vegetables, three things at least are necessary, viz., a suitable soil, pure seed, and clean culture ; to which may be added as equally necessary, an abundant supply of good barn-yard manure, supplemented, when this runs short, by artificial fertilizers. The exposure for a vegetable garden should be preferably south or southeast, or nearly so. The soil should be naturally rich and friable, a sandy loam being among the best. If the soil be stiff it should be gradually mellowed by the free use of barnyard manure, or, if convenient, by the addition of sand. If wet, or inclined to hold an excess of moisture, it should be under-drained, preferably by tile; but if possible, a location should be selected naturally dry and free from surface water.

A dark colored soil, or one supplied with a goodly portion of decayed vegetable matter, will produce the earliest crops. If the soil be shallow, it should be deepened gradually by plowing or spading an inch or two deeper each year, and not all at once by trenching or sub-soiling, unless manure and money be both abundant. A sandy soil may be greatly improved by adding more or less vegetable mould from the woods. To produce the best and uniform results, the vegetable garden should have at least one foot of good rich soil. The roots of large trees should not be allowed to encroach on any part of the garden, though large trees, especially evergreens, sufficiently far off, afford a valuable protection on the north and west.

Mark the garden off into squares or beds of convenient size, to facilitate the practice of a rotation of crops, which is an important matter. As a rule, never let the same crop or kind of vegetable occupy the same bed or spot two years in succession. Potatoes, onions and a few other things may form an exception to this rule, but it is nevertheless better to keep up the rotation. Every year these beds must be warmed up by a liberal coat of manure, which should be thoroughly mixed with the soil. Grow everything in drills or
straight lines. Larger crops from a given surface are grown in this way, and cultivation becomes simple and comparatively easy. The space between the drills, and other special information, is given in the body of the catalogue; the least distance is named, in order to economize space-it might be increased in some cases with advantage.

The ground should be frequently hoed to kill the weeds and keep the soil mellow; and the proper time to hoe is just when the weeds appear above ground. Briefly, the proper way to kill weeds is never to let them grow. If the weeding be done at the time suggested, it can be mostly and quickly done by the use of a sharp-toothed steel rake.

Where the material and conveniences are at hand, much time may be gained by starting certain kinds of plant in a hot-bed, or even in a cold-frame, the latter being a very convenient thing, even on a small place. The hot-bed is chiefly intended for raising early Tomatoes, Egg-Plants, Peppers, Cabbage, Cauliflower, Lettuce, etc.; but as all these plants can now be bought cheaply of the seedsmen at the proper time, the expense and labor of a hot-bed can, in many cases, be dispensed with, especially on small places.

The above brief suggestions, and the special directions dispersed through the catalogue, if carefully observed, will go far toward securing early and abundant crops.

To Prepare a Cold-Frame. - The cold-frame is simply a frame set on the ground, no bottom heat being applied. It is banked up on the outside during the winter with salt hay, straw, or coarse litter. The soil is prepared by forking in and thoroughly mixing to the depth of ten or twelve inches a liberal quantity of old, well-rotted manure. The manure of an old hot-bed is good for the purpose. The frame is prepared in the fall, and young Cabbage, Cauliflower, and Lettuce plants set out in it in time to get well established before very cold weather. Cauliflower and Cabbage should be set down to the first leaf, and the soil made firm around the plants. The seed is usually sown, in the vicinity of New York, from the 15 th to the 20th of September, but the very early kinds some eight or ten days later. The young plants will be ready to transplant in about twenty-five or thirty days. During cold nights and stormy days, the beds should be closely covered with the sashes, and these further protected by straw mats or shutters. Cauliflower needs more and closer protection than Cabbage, as it is rather more tender. During mild days admit air freely, the object being to keep the plants in a dormant state, without actual freezing, so that when spring comes the plants are in a forward state for setting out early crops. Seeds of Cabbage, Cauliflower, Lettuce and Radish may be sown in a cold-frame in the spring from the last week in February to the first week in March. The frame should stand in a warm and sheltered spot, and be kept from freezing by mats or a thick covering of straw during cold nights.

## DIRECTIONS FOR MAKING A HOT-BED.

In the vicinity of New York, from the first to the middle of March is quite early enough to make a hotbed, and even a little later will do well enough. The time must vary according to the ${ }^{1}$ atitude. Provide a quantity of fresh horse manure from the stables, and add to this, if they can be had, one-third to one-half of its bulk of leaves. Mix them thoroughly, tramping down the mass in successive layers, and form into a large pile, so that fermentation will proceed even in severe cold weather. In two or three days fermentation will be apparent by the escape of steam from the heap. Now turn again, and allow the heap to remain two or three days longer, or until the second fermentation commences. Make an excavation, or pit, two-and-a-half feet deep, and of a size suited to the number of plants required. The pit will be better if built up of brick. It should be make in some dry, sheltered spot, facing the south or east if possible. Hotbed sashes are usually $6 \times 3$ feet, and one sash will generally give early plants enough for a large family. The frame for sashes should be eighteen inches high at the back and twelve inches in front, which will give the proper slope to catch the sunlight. Cross-pieces should be placed for the sashes to slide on, to facilitate opening and shutting the frames. When everything is ready, the manure is placed in the pit and trodden down firmly in layers to the required depth, two to two-and-a-half feet. Then put on the sashes, and keep the pit closed until the heat rises. At first it will probably be $100^{\circ}$ or more, which is too hot to sow the seed in ; but in two or three days it will subside to $90^{\circ}$ or a little less, when the soil may be put on to the depth of six to eight inches. The heat may be readily ascertained by plunging a thermometer in the manure. The soil should be af well-rotted sod (or common garden soil will do) mixed with about a third of fine, old manure, and in this the seeds may be sown thinly in drills two or three inches apart, and afterwards (as soon as out of the seed-leaf) either thinned out or else transplanted to another frame. Air must be given every mild day by raising the sashes at the back. Water with tepid water whenever necessary, and during cold nights and snow storms keep covered with straw mats or board shutters. Tomatoes, Peppers and Egg Plants should be sown in a separate frame from the Cabbage, Cauliflower and Lettuce, as they require more heat than the latter. The same directions may apply to hot-beds made on the surface of the ground, except that the manure should be at least a foot wider on all sides than the frame.

# New. Rare and Valuable Flower Seeds. 

Ageratum, "Celestial."

A very compact dwarf strain of this popular half-hardy Annual, about six inches high. The flowers,


JEWEL ASTER. which are profusely produced in large umbels, are of a beautiful light blue color, and sweetly suggestive of its name. Per pkt., 25 cts.

## Aster, "Snowball."

An entirely new class, originated from the "Mignon" Aster, to which it corresponds in habit and height. The flowers are quite unique, resembling somewhat those of the Liliput Dahlia. In form they are semispherical, with short, thickly-set, imbricated petals. As many as thirty perfectly formed pure white flowers are produced on each plant. These are especially suitable for cutting, as they last longer than any other sort. This variety is also well adapted for pot culture. Per pkt., 25 cts.

## Aster, "Triumph," Scarlet and White.

One of the most beautiful of this fine class of Dwarf Asters. The flowers are produced very freely, and are of exceptionally long duration. Being regularly striped in deep scarlet and white, they are very effective for bedding, and are also suitable for growing in pots. Per pkt., 25 cts .

> Aster, "Jewel." (Apple-blossom and Deep Rose.)

For cutting and bunching, these splendid new varieties are especially desirable. The flowers, which measure from $21 / 2$ to 3 inches across, are produced on long stalks, and are perfectly round in shape. In separate colors, Apple-blossom, per pkt., 25 cts; Deep Rose, per pkt., 25 cts.

## Berteroa Mutabilis.

This beautiful herbaceous perennial has also been named Alyssum mutabile, and its white spikes of flowers res 3 mble the well known Sweet Alyssum. It makes, however, a much larger bush, growing from $1 \frac{1}{2}$ to 2 feet high, and will afford a large supply of flowers for cutting from early spring to fall. It will thrive wherever the Sweet Alyssum will do well. Per pkt., 10 cts.

## Calendula, "Orange King."

This admirable novelty has taken first prizes wherever exhibited. It is the largest flowering Marigold in cultivation. The plant grows very regularly to a height of about ten inches, and the flowers, which are of a brilliant deep orange color, perfectly shaped, and of extraordinary size, are produced very abundantly. Per pkt., 25 cents.

## Calendula Suffruticosa.

For borders and groups this new dwarf Marigold will prove invaluable. It grows about nine inches high, and is fovered with bright yellow single flowers of a delicate and graceful appearance. Per pkt., 25 cts.

## Cockscomb, "Empress."

A magnificent strain, producing combs of very large size and of a rich dark crimson color, with dark green foliage. Height about ten inches. Per pkt., 10 cts. ; per oz., $\$ 1.25$.

## Cockscomb, "Queen of Dwarfs."

The finest Cockscomb of all. It grows but six inches high, with oeautiful dark rose colored combs. It is of very even growth, and for bordering or massing it cannot be surpassed. Per pkt., 10 cts. ; per oz., \$1.25.


## Cineraria Hybrida Grandiflora Kermesina.

This is one of the most richly colored and effective varieties of this magnificent greenhouse Annual. The
 flowers average $21 / 2$ inches across, and have generally a double row of petals. They are of an intense glowing velvety dark crimson color, and are produced true from the seed now offered. Per pkt., 50 cts.

Delphinium Cardinale. (Scarlet Larkspur.)
A very pretty Californian species with bright scarlet flowers. It is easily grown from seed; three to four feet high. Per pkt., 25 cts .

## Canna, Crozy's Mixture.

These seeds, if sown in February and March and kept in good beds, will become strong, beautiful and massive plants, in full bloom from the end of July until frost. Crozy's strains are quite new and distinct in habit and foliage, mostly dwarfs. Per pkt., 10 cts . ; per oz., 50 cts.

## Carnation, Half-Dwarf Double "Margaret."

About ten to twelve inches high. The plants are of very vigorous growth, and the stalks so numerous and strong that no external supports are required. The flowers are produced profusely and in every color, including yellow. This variety is especially adapted for pot culture, and can be grown in the open air, and then transplanted into pots. By pruning the flower stalks throughout the summer an extraordinary profusion and richness of flowers may be obtained. Per pkt., 40 cts.

## Castor Beans, Carman's Hybrids.

Two years ago Mr. Carman crossed the several so-called species of Ricinus, known in catalogues as Cambodgensis, Africanus, Gibsonii, Sanguineus, etc. Many of the resulting hybrids are remarkable in several respects. Some of them grow tall and branshing as Sanguineus, with variously colored stems, and foliage even darker than that of either Gibsonii or Cambodgensis, Others are dwarfs, growing only to the height of two or three feet, with leaves of lustrous metallic shades, varying from a copper red to dark bronze. Per pkt., 25 cts.

## Centaurea Cyanus Flore Pleno.

(Double Corn-Flower, Mixed.)
After several years of careful selection a fixed form of double Corn-Flower has at last been developed. The flowers resemble in many respects those of Gaillardia Lorenziana, and are very serviceable either for garden decorations or for cutting. The mixture we now offer comprises the popular varieties in white, pink, light blue, red, rose, etc., and besides these several shades and stripes that are quite new. Per pkt., 10 cts.

## Centaurea Cyanus Nana Compacta, "Victoria."

This beautiful novelty is an annual specially adapted for carpet bedding, and equally suitable for pot culture, and cannot fail to be greatly appreciated when more generally known. The single blooms are somewhat smaller than those of the ordinary Corn-Flower, and larger than those, of the dwarf variety, and in color a brighter blue than either. The plant grows six inches high, forming a perfect ball, completely covered with flowers; it will quickly be found a desirable acquisition to the flower garden. Per pkt., 20 cts.


Chrysanthemum Coronarium Imbricatum fl. pl.
This splendid new Double Annual Chrysanthemum differs most markedly from the old types in the ar-


CHATER'S HOLLYHOCKS rangement of its petals, which, instead of lying flat one upon another, are vaulted and arranged like tiles. The blooms are globular in shape, very double, and of an intensely glowing golden yellow color. These flowers, which are produced profusely till late in the autumn, are unsurpassed for decorative purposes, and preserve their brightness and beauty for about ten days after cutting. Per pkt., 25 cts.

## Godetia, "White Pearl."

A new dwarf variety of this hardy annual distinguished by very regular and compact growth. The flowers are of a pure satiny white and exceedingly attractive. Most suitable for dwarf beds. Per pkt., 25 cts.

## Magnificent Double Hollyhocks.

Grown from Chater's celebrated collection, which are admitted to have entirely revolutionized the popular estimation of the Hollyhocks.

| Double | White | $\begin{aligned} & \text { Per pkt. } \\ & . \$ 010 \end{aligned}$ | $\begin{array}{r} \text { Per oz. } \\ \$ 100 \end{array}$ |
| :---: | :---: | :---: | :---: |
| " | Crimson | 10 | 125 |
| " | Light Lavender . | 10 | 100 |
| " | Magenta. | 10 | 150 |
|  | Mixed | 10 |  |

## Ipomœa Bronsoni.

(A new perennial Ipomea with corrugated stem.)
A native of Cuba, and was brought to this country by Dr. J. O. Bronson, on whose plantation in Florida the seed we now offer was grown. It is of most luxuriant growth, extending fifty feet in every direction, and completely hiding any structure over which it runs. It produces a profusion of white flowers over an inch in diameter, and of exquisite perfume. The seed must be started under glass. Per pkt., 25 cts.

## Dwarf Perennial Phlox.

This new race grows only from twelve to eighteen inches high. The bushes are pyramidal-shaped and the flowers, which are large, finely shaped, and of the richest colors, are produced from July till late in the fall. The Perennial Phlox are known to be among the most valuable of our hardy flowers, and this dwarf form cannot fail to be very useful for the border as well as for the permanent bedding arrangements now coming into favor with plant lovers. Per pkt., 40 cts.

## Poppy, "Flag of Truce."

A splendid large single white Poppy, growing about three feet high. Very attractive and showy, and of great value for bedding or growing for cut flowers. It will prove very desirable upon trial. Per pkt., 10 cts.

## Primula Sinensis Fimbriata, "Golden Feather."

So called from the remarkable resemblance of its leaves to those of the popular "Golden Feather (Pyrethrum aureum). The flowers of this Chinese Primrose are pure white, and in combination with the beautiful yellow foliage, the effects is very pleasing and decidedly unique. The plant is an odd departure from ordinary forms, and thoroughly distinct. Per pkt., 50 cts.

## Salvia Splendens Compacta Nana.

A new strain, more dwarf and compact in growth than the ordinary sort; will increase the popularity of this already largely used bedding plant, as it will enable a rich glowing scarlet line to be produced in the fall, of moderate height. Per pkt., 25 cts.


SALVIA SPLENDENS COMPACTA NANA.


ROMNEYA COULTERI.

## Romneya Coulteri.

A fine half hardy perennial from California. It has large white flowers, sometimes six inches in diameter, resembling somewhat a huge Poppy. Grows two feet high and upwards. Per pkt., 10 cts.

## Zinnia Haageana Pumila fl. pl.

This is a most decided improvement upon the old Zinnia Haageana, growing scarcely half as high, being much more compact in growth, and producing three times as many flowers, which are of an intense orange yellow and very double. Very suitable for pot culture and for edgings. Per pkt., 25 cts.

## Zinnia, Tom Thumb Mixed.

The plant of this dwarf double variety vary in height from four to twelve inches, forming compact freeflowering bushes with blooms resembling those of the Pompon Zinnia. They are especially suited for edgings, small beds and groups. Peer pkt., 25 cts.

## Zinnia, Tom Thumb White.

Resembling in growth and habit the above, but with very beautiful double white flowers. Per pkt., 25 cts.


DOUBLE PORTULACA.

## Fine Mixed Double Portulaca.

Our selection of these is very choice, and has been carefully maintained at its high standard for many years. The flowers are very beautiful, resembling small roses, and always delight the planter. Per pkt., 10 cts.

# New and Selected Strains in Vegetables. 

## Bean, "Pride of Newtown."

We have pleasure in again offering this admirable new Bush Bean. With the exception of our Extra
 Early Refuge Wax, it is the earliest, and, without any exception, it is the most prolific in cultivation. It is of robust growth, with very long, light green, flat pods. The plants are of very bushy growth, and should have plenty of space in the rows; sown thinly, they will produce forty to fifty pods on a plant. Per qt., 50 ets.

## Beans, Thorburn Extra Early Refugee Wax.

Without exception, the earliest Bean grown. It is a perfect Refugee with wax pods that are long, round and of a golden yellow color. It is suitable for early or late sowing, and for a wet or dry season. If sown in spring, it will give seed in time for a second crop in fall. Is an immense yielder. Per qt., 75 cts.

## Bean, "The Shah."

A moderately early Dwarf Bean, producing a large number of remarkably long poas, sometimes eight inches in length, and very straight, slender and almost cylindrical. Foliage dark green. Seed long and entirely black. Per qt., 40 cts.

## Cauliflower, Thorburn Gilt-Edge.

The very best and surest of all, without any exception. It is a sure header, either for early or late sowing, and can be left longer in the field without decaying than any other sort. It matures immediately after Thorburn Snowball, but is a much heavier sort. (See cut, page 19.) Per pkt., 25 cts. ; per oz., $\$ 3.50$.

## Cucumber, Thorburn New Everbearing.

We again call special attention to this entirely new and unique variety. It is of small size, very early enormously productive, and valuable as a green pickler. The peculiar merit of this novelty is that the vines continue to flower and produce fruit until killed by frost, whether the ripe Cucumbers are picked off or not-in which respect it differs from all other sorts in cultivation. Cucumbers in every stage of growth will be found on the same vine. Per pkt., 10 cts ; per oz., $\$ 1.50$.


THORBURN EVERBEARING CUCUMBER.

## Cabbage, Thorburn "Market Gardener's Private Stock" Large Late Flat Dutch.

A particularly fine strain of the immense-sized winter cabbages raised on Long Island. An unfailing


SELF-FOLDING TRIANON COS LETTUCE. producer of heads of enormous size. Most popular sort for market gardeners. Per oz., 50 cts.

## Cabbage, Thorburn Improved Stone-Head Heavy Red Dutch.

Finest market gardener's strain of red cabbage. It is of unusual size, color and weight, with a large, solid, very dark red head, the result of careful and intelligent selection. Per oz., 80 cts.

## Lettuce, Large Boston.

A selected new very large strain of the Boston Lettuce. The largest of all for forcing. Per oz., 40 cts.

## Lettuce, Self-Folding Trianon Cos.

Finest of all the Cos varieties; very early, being ready for use before the Paris White Cos Lettuce. Very large, solid, crisp and of delicious quality. Per oz., 40 cts.

## Musk Melon, Snumway "Giant."

Round-shaped, light green color; skin smooth with little netting. Flesh deep salmon color, thick, fine-grained and not stringy. Average weight, eighteen pounds. Per oz., 30 cts.; per lb., $\$ 3$.

## Water Melon, Vau Cluse Red-Flesh.

This is one of the most promising of the many sorts lately introduced. It is of French origin, very early, and of large size, with stem end slightly inclined to point. The flesh is a bright crimson, very sweet, not in the least stringy, and coming to within one-eighth inch of the skin; the seeds are also red. The rind, though so thin, is very tough and the shell glossy, so that this melon is an excellent shipper. It is of a dark green color, beautifully threaded with a still darker green. Per oz., 15 cts.

## Pepper, New Brazilian Sweet Upright.

An entirely new bright red extra large Sweet Pepper, now for the first time introduced. Per plat., 10 cts. ; per oz., 75 cts.

## Radish.

## Our Beautiful Forcing Strains.

All very beautiful and crisp, and maturing in about twenty days.

Per oz.
French Scarlet Turnip, for forcing $\$ 015$
" Scarlet Turnip, WhiteTipped, for forcing . . . . 15
" Deep Scarlet Turnip, for forcing
Prussian Globe-Shaped, for forcing ..... 15
Roman Carmine,for forcing ..... 10
Non Plus Ultra. Round, scarlet, for forcing ..... 15


SCARLET TURNIP FORCING RADISH.


## Tomato, Thorburn's Long-Keeper.

Now Offered for the First Time.
The following letter gives its origin and history :

Experiment Grounds of The Rural New-Yorker, September 3, 1890.

Messrs. J. M. Thorburn \& Co.
Gentlemen: About thirteen years ago I raised all the kinds of Tomatoes popular at that time. Six of each were selected the same day, of apparently the same stage of maturity, and of a bright red color, as well as of the largest size and shapeliest form. These were kept in a darkened room until all were more or less decayed.

From the last one to decay I selected seeds, which were planted the next year. Careful selections have been made every year since, always with a view to increasing their long-keeping qualities, uniformity in shape, earliness in ripening, as well as the productiveness of the vines.

This is the origin of this Tomato which has been named "Thorburn's Long-Keeper," and which is now offered to the public for the first time.
(Signed)
E. S. CARMAN.

This must prove a most valuable variety, as the result of such skillful and systematic selection on welldefined lines, and is commended to the careful attention of market gardeners. Per pkt., 25 cts .


Plainfield, N. J., Oct. 28, 1800.
Messrs. J. M. Thorburn \& Co.
Sirs: Last spring I bought of you one barrel of Rural seed potatoes, which I cut to two eyes, and planted in rows thirty-three inches apart and fifteen inches in the row. Soil was sand loam, in corn the previous year. Fertilizer at the rate of 800 pounds per acre was distributed at time of planting. No other manure was used. The crop measured sixty-seven bushels large and less than one barrel of small potatoes. I planted eight varieties of potatoes this year. The Rural yield was nearly double the best of the others. Shall plant three acres of Rurals next year.

## VEGETABLE SEEDS.

Please notice that our prices are quoted at the lowest New York figures, and do not include the prepayment of express charges or postage. If it is desired that the charges be prepaid, add 8 cents per pound for mail, or rates as per scale on second cover page for express.

See page 45 of this catalogue for complete assortments of Vegetable Seeds of approved and choice sorts, for from $\$ 5$ to $\$ 25$.

## ASPARAGUS.

Asperge. Esparrago. Spargel.
 foot apart in April or May, and keep down all weeds. To
secure strong, healthy plants, thin out the seedlings to three or four inches in the rows, saving only the strongest. The one year old plants should be set out in sṕring, in a rich, sandy loam, dug eighteen inches deep, into which has been worked plenty of well-rotted manure. If a stiff clay soil is all that can be had, add plenty of sand or sifted coal ashes to loosen it up, and also see that it is well under-drained. In planting for private use, set out in beds five feet wide, three rows in a bed, the outer being each one foot from the edge, and allow twelve inches in the rows; set the plants at least six inches below the surface. If set out in autumn, top-dress with six inches of manure. For market on a large scale, set out 4 by $11 / 2$ feet.

Every fall a good dressing of coarse manure should be applied after the tops have been cut, and in the spring forked in. Never cut too close. The roots need the benefit of some foliage during the year, else they will weaken and die.

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.
15 Conover's Colossal. The most approved and standard sort. The famous Argenteuil

16 Palmetto. Of southern origin; a very desirable bright green Asparagus . . . . . . . $10 \quad 25 \quad 80$
Two year old roots . . . . . . . . . . . . . . . . per 100, $\$ 1.25$; per $1,000, \$ 9$.

## ARtichoke.

Artichaut. Alcachefa. Zurtichofe.

Culture.-Deep rich, sandy loam, with plenty of well-rotted manure. Sow seeds in April and May, and when large enough, transplant into rows three to four feet apart and two feet in the rows. They reach maturity the second year. Cover with litter when cold weather commences, first tying up the leaves so that they will occupy less space, and in spring fork in a dressing of manure. It is an excellent vegetable and easily grown, thriving in any situation, provided the heads are cut off and used as they get ready; if left to ripen on the plant they will exhaust it, and no more are produced that season. Heads are unfit for culinary purposes after the flowers expand.

21
Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
Erench Globe. The standard and best variety . per pkt., 5 cts.. $\$ 030 \quad \$ 080 \quad \$ 300$
Iarge Green Naples. Large; light green. .per pkt., 10 cts. .
Largest Paris. A selection of the Green Globe
 Jerusalem Artichoke. See page 49.

## BEANS.

As a farinaceous food for man, the Bean is considered far superior to any other legume, and next in importance to wheat. The modern varieties leave little to be desired.

## ENGLISH DWARF BEANS.

Feve de Marais. Haba. Grofje Bohnen.
Culture.-Sow in drills two feet apart, as early in the spring as the ground can be worked (these are as hardy as Peas), in order to get them into pod before the heat of summer. When in pod, break off the top of the plant to check the growth. Plant and hoe same as for Dwarf Beans ; a strong soil suits them best. These beans are eaten shelled.

27 Early Mazagan. The earliest of this class
Per qt. Per $1 / 2 \mathrm{pk}$. Per pk. Per bu.
29 Broad Windsor. The largest and best of the class of English Dwarf Beans
for main crop, good
25

31 Sword Long Pod. A size smaller than Windsor . . . . . . . . . . . . . . . 25
33 Green Nonpareil. A green "Long Pod"

| 75 | 1 | 25 | 450 |
| :--- | :--- | :--- | :--- |
| 75 | 125 | 400 |  |
| 75 | 1 | 25 | 400 |

DWARF OR SNAP BEANS.
Haricots Nains. Frijoles. Krup=Bohnen.
Culture.-About the first of May select a warm dry sheltered spot; dig and manure slightly; make
 drills two inches deep and eighteen inches to two feet apart; drop the beans three inches apart in the drill, and cover not more than two inches deep. Keep hoed, when not wet, and the weeds killed, Sow every two weeks for a succession.
36 Ne Plus Ul-
Per qt.Per $1 / 2$ pk. Per pk. Per bu.
tra. An ex-
tra early
sort; green,
full flat
pods; ex-
ceedingly
productive ;
also suitable
for forcing. \$0 $30 \quad \$ 090 \quad \$ 150 \quad \$ 500$ 38 Best of All.

Early and
superior;
round, green
fleshy pods.
40 Boston Favorite (Large Goddard). Red-podded Dwarf Horticultural
44 Extra Early Valentine. A selected early strain of this popular round-pod bean
46 Early Mohawk. Long, flat and straight pods; very hardy
48 Early China. Early, and continues long in bearing

| 30 | 90 | 150 | 5 | 50 |
| :--- | :--- | :--- | :--- | :--- |
| 25 | 75 | 1 | 25 | 450 |
| 30 | 90 | 150 | 5 | 50 |
| 25 | 75 | 125 | 450 |  |
| 25 | 75 | 125 | 400 |  |
|  |  |  |  |  |
| 50 | 150 | 2.50 | 800 |  |

52 Early Yellow Six-Weeks. Resembles the "Mohawk" save in color; flat pods; a popular variety

| 30 | 90 | 1 | 50 | 50 |
| :--- | :--- | :--- | :--- | :--- |

54 Long Yellow Six-Weeks. Early; the leading market sort; full, flat green pods; good quality

30
6 Dwarf Horticultural. Late and productive
25
50

| 75 | 125 | 450 |
| :--- | :--- | :--- |

9 The Black Shah. Moderately early; very long green pods . . . . . . . . . .
25 green, flat pods

90
61 Dwarf Iyonnaise. A fine new variety with very long pods . . . . . . . . . .
62 Thorburn Extra Early Refugee. This invaluable new strain has all the superior qualities of the famous Refugee, and is fully two weeks earlier in podding; it is a sure bearer

| 35 | 125 | 200 | 650 |
| ---: | ---: | ---: | ---: | ---: |
| 30 | 90 | 150 | 500 |
| 30 | 90 | 150 | 500 |
| 25 | 75 | 125 | 450 |

## WHITE BEANS.




THORBURN'S EXTRA EARLY REFUGEE WAX BEANS.

69 Boston Small Pea Bean. Very early white bean, very hardy and prolific. Pods generally in clusters of four . . $25 \quad 100 \quad 150 \quad 500$ 69a Emperor William. Very long pod. Earliest white bean for forcing; a good sort.
$25 \quad 100 \quad 150 \quad 500$

## 70 ExtraEarly Maine.

A new small white kidney-shaped variety; valuable as a string, baking or soup bean; very early. The pod is neither round nor flat. . . . . . . .

72 Mexican Tree Bean. A very productive white sort of upright growth . . . .
76 White Scimeter. Very
76 White Scimeter. Very productive snap
White Kidney. Excellent, either green or ripe
White Marrow. Good as either a string or shell bean

## DWARF WAX BEANS.

81 Black Wax. Very early and delicious; round yellow pods.
82 Black-Eyed Wax. A cross between Golden and Black Wax; very early and very productive; yellow pods
83 Black Butter Wax. Bears large round pods of good quality .
84 Improved Prolific Black Wax. Very early and prolific. The pods are round, full, stringless and of fine quality
85 Algerian Black Wax. Very productive; round pods
$85 a$ Bismark Black Wax. New strain, resembling in growth and appearance Wardwell's Kidney Wax.
86 Crystal Wax. Of rather spreading habit, with round pods.
87 Date Wax. Very early; long yellow stringless pods
88 Detroit Wax. Is very much like Golden Wax, but is less liable to rust
89 Dwarf IMont d'Or Wax. Gold yellow, stringless; round fleshy pod
90 Flageolet Red Wax. Flat yellow stringless pods of great length and breadth
94 Golden Wax. Very early; round golden pods
95 Golden-Eyed Wax. Very hardy and prolific, with flat yellow pods.
96 Ivory-Pod Wax. Very early; round ivory white golden pods
97 Thorburn Extra Early Refugee Wax. A perfect Refugee with long, round yellow wax pods. Suitable for early or late sowing, and an immense yielder. A twin brother of No. 62

| 25 | 75 | 1 | 25 | 450 |
| :--- | :--- | :--- | :--- | :--- |
| 25 | 75 | 125 | 450 |  |
| 25 | 75 | 125 | 450 |  |
| 25 | 75 | 125 | 400 |  |
| 25 | 75 | 125 | 400 |  |


| 30 | 90 | 150 | อ 00 |
| :---: | :---: | :---: | :---: |
| 35 | 125 | 200 | 750 |
| 30 | 90 | 150 | 500 |
| 30 | 90 | 150 | 500 |
| 30 | 90 | 150 | 500 |
| 30 | 90 | 150 | 500 |
| 30 | 100 | 175 | 600 |
| 30 | 90 | 150 | 500 |
| 35 | 125 | 200 | \% 00 |
| 40 | 100 | 175 | 650 |
| 35 | 100 | $1 \%$ | 650 |
| 30 | 90 | 150 | 500 |
| 50 | 150 | 2 50 | 800 |
| 30 | 100 | 175 | 600 |
| 75 | 250 | 400 | 1400 |
| 30 | 90 | 150 | 550 |
| 30 | 90 | 150 | 550 |
| 25 | 400 | \% 00 | 2500 |

## FRENCH DWARF FLAGEOLET BEANS.

104 Improved Green-Seeded. Used extensively by the French as a shell bean when in the green state; they are far superior to Limas
Wonder of France, Green-Seeded. Long straight pods of lively green; early and fine
Canadian Wonder, Red-Seeded. Large, broad, flat, green pods; quite prolific

## POLE OR RUNNING BEANS.

Haricots a Rames. Frijole de Bejuio. Stangen=Bohnen.



CHALLENGER LIMA BEANS. Limas) to the latter part of May, in hills four feet apart each way. Limas should not be planted until warm weather has fairly set in. One quart of Limas will plant about 100 hills, allowing four or five beans to a hill, and of the smaller sorts about 200 hills. Poles, eight or ten feet long, should be firmly set in the center of the hills before putting in the seed.
115 Horticultural or Speckled Cranberry. Showy, and ${ }^{\text {Per qt. } 1 / 2} \mathrm{pk}$. Per pk. Per bu. excellent either as a snap or shell bean . . . . . . $\$ 035 \quad \$ 125 \quad \$ 200 ~ \$ 700$
118 Dutch Case-Knife. Pods, long, green and flat; can be either snapped or shelled when used .
127 Southern Prolific. A continuous bearer; of good quality

| 30 | 90 | 150 | 550 |
| ---: | ---: | ---: | ---: | ---: |
| 30 | 100 | 175 | 600 |

129 Scarlet Runner. A popular English pole bean; very ornamental.
$35 \quad 125 \quad 225 \quad 800$
130 Southern Crease-Back. Long, round, stringless pods, fleshy and tender.
$\begin{array}{lllll}35 & 125 & 2 & 25 & 800\end{array}$
131 Early Jersey Lima. A few days earlier in maturing than the large Lima.
$\begin{array}{llll}40 & 125 & 225 & 800\end{array}$
133 Large White Lima. Largely grown and highly esteemed
$\begin{array}{llll}40 & 125 & 225 & 800\end{array}$
134 Challenger Lima. Thick and productive; the best of all
$40 \quad 150 \quad 275 \quad 1000$
135 Small White Lima or Sieva. Small, but very good quality
$40 \quad 125 \quad 200 \quad 700$
136 King of the Garden Lima. Large in pod and bean ; productive . . . . . . . . . . . . . . . . . . . . . .
137 Dreer Lima. Thick, and of fine quality
$40 \quad 150 \quad 250 \quad 900$
137.

137a Speckled Large Lima
$\begin{array}{llll}40 & 1 & 25 & 2 \\ 25 & 800\end{array}$
$137 b$ Red Large Lima . . . . . . . . . . . . . . . . . . . .

| 50 | 1 | 75 | 3 | 25 | 12 |
| :--- | :--- | :--- | :--- | :--- | :--- |

138 Dreer Golden Cluster. Very productive; large, golden yellow, fleshy pods
$\begin{array}{lllll}50 & 150 & 275 & 1000 \\ 30 & 100 & 175 & 600\end{array}$
153 White Dutch Runner. Same habit as the Scarlet Runner, flowers and beans being white . . . . . . .

| 30 | 100 | 1 | 75 |
| :--- | :--- | :--- | :--- |
| 35 | 125 | 200 | 700 |

167 Giant Red Wax. Pods long, yellow and tender; very good
$50 \quad 175 \quad 3001100$
171 Transylvania Butter. Broad, green, stringless and tender; pods from eight to ten inches long
$75 \quad 275 \quad 500 \quad 1800$
173 Mont d’Or or Golden Cluster. Early, productive; golden wax pods
$\begin{array}{llll}35 & 125 & 200 & 700\end{array}$
179 French Yard Long. Pods sometimes grow from two to three feet long; very curious; should be grown on Pea-brush.

100

## Borage.

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

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
183 Borage

- $\$ 0 \quad 15 \quad \$ 0 \quad 30 \quad \$ 100$


## BURNET.

## Pimpernelle Petite. Pimpinela. Pimpernell.

The leaves hare a warm, piquant taste, and are useful for salads and soups. Sow early in spring, half an inch deep, thinly in rows.

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
191 Garden
\$0 $10 \quad \$ 025 \quad \$ 075$

## BEET.

## Betterave. Remolacha. Salatrïben.

Culture.- Sow as early in the spring as the ground can be worked, and every two weeks after for a suc-
 cession, up to the first week of July. For general crop sow about the middle of May. The soil should be light, sandy loam, well enriched with stable manure, and plowed and harrowed until very fine. Sow in drills one foot to fifteen inches apart, and when well up, thin from four to six inches. The young Beets pulled out of the rows are excellent used as Spinach. Per oz. Per $1 / 4 \mathrm{lb}$. Per lb. 193 Extra Early Flat Turin. A dwarf growing flat beet with delicate leaves; deep blood color; tender and very early . . ...........

## 195 Extra Early Dark Egyptian. Very early, and of dark blood

 color; rather flat in shape . . . .197 Extra Farly Eclipse. Very early; round-rooted and dark red. . . .
206 Dewing Extra Early. Early; of
fine form and flavor, and good for market.
$\$ 020 \quad \$ 050 \quad \$ 150$
$10 \quad 20 \quad 60$

212 Farly Bassano. Early; flat, light color
$10 \quad 20 \quad 60$

213 Edmand Early Blood Turnip. A market gardener's strain of great regularity in shape; deep blood skin, and very dark flesh of best quality
$10 \quad 20 \quad 60$

214 Early Blood Turnip. Dark red, and of fine flavor; productive . . . . . . . . . . . . $10 \quad 10 \quad 20 \quad 60$
215 Bastian Early Turnip. One of the earliest; light color . . . . . . . . . . . . . . . . . $10 \quad 20 \quad 60$
220 Early Yellow Turnip. Flesh yellow and tender . . . . . . . . . . . . . . . . . . . $10 \quad 20 \quad 75$
229 Long Smooth Blood. A good late variety . . . . . . . . . . . . . . . . . . . . . .
231 Long Smooth Blood Improved. Of deep blood color; more uniform and not so thick as the old sort; grows more out of the ground than in, and is highly prized by market gardeners
$10 \quad 30 \quad 100$
Foliage Beets.
Kinds of which the Leaves only are used as Spinach; also very Ornamental.

| 240 | Ne Plus Ultra. Dark |  | Peroz. Per $1 / 4 \mathrm{lb}$. Per lb. <br> . \$0 $15 \quad \$ 0 \quad 30 \quad \$ 100$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 242 | Victoria. Metallic red |  | 15 | 40 | 150 |
| 243 | Dell's. Black-leaved |  | 15 | 30 | 100 |
| 247 | Scarlet-Ribbed Chilian. . |  | 15 | 40 | 150 |
| 248 | Yellow-Ribbed Chilian. |  | 15 | 40 | 150 |
| 249 | Crimson-Veined Brazilian | These are grown exclusively for their handsome | 15 | 30 | 100 |
| 250 | Golden-Veined Brazilian. | foliage | 15 | 30 | 100 |
| 252 | Scarlet-Veined Brazilian. |  | 15 | 30 | 100 |
| 253 | New Dracæna-Leaved |  | 15 | 40 | 150 |

## Beet-Mangel Wurzel, Sugar, etc.


#### Abstract

Runfelrüben. Culture.-As all Mangels require a deep soil in order to grow well, plow and subsoil at least a foot to eighteen inches, and apply plenty of rich stable or Thorburn's Complete manure. Sow in May or June, in rows eighteen inches to two feet apart, and thin to eight inches in the rows. Young plants may be transplanted to fill up vacancies. Sow in addition, when the plants are three to four inches high, at the rate of 200 lbs . Complete manure, 200 lbs . bone flour and 400 lbs . salt per acre. As soon as frost occurs, dig the crop. But in order to be well preserved for gradual consumption during the winter, Mangel Wurzels should be heaped to a height of perhaps six feet, on a dry, sloping situation ; cover at first with a piece of canvas, and as the cold increases, this should be replaced by about six 

BRAZILIAN ORNAMENTAL-LEAVED BEET.


## BEET-MANGEL WURZEL, SUGAR, ETC.-CONTINUED.

inches of either salt hay, straw, sea weed, or even corn stalks. Lest this covering be displaced by the
 wind, a light layer of earth is necessary. So soon as this surface soil becomes frozen, about six or eight inches more of earth should be placed over the entire heap. By following up this gradual process of covering, all danger of heating will be obvi_ ated, and the roots will keep in perfect order.
Sow from four to five pounds to the acre.
Prices for large quantities upon application.
60 Tong Yellow IMangel Wurze Per oz. Per $1 / 4$ b. Per lb, g Yellow Mangel Wurzel. A good main crop sort, of which an enormous quantity can be grown on an acre with good culture
$\$ 0 \quad 10 \quad \$ 015 \quad \$ 040$
263 Long Red Mangel Wurzel. Same as the preceding, save in color . . . . . . $10 \quad 15 \quad 30$
270 Yellow Globe Mangel Wurzel. Large and productive; keeps well . . . . . .
$10 \quad 15 \quad 30$
273 Orange Globe. Similar to No. 270, but of a higher color
$10 \quad 15 \quad 30$
274 Red Globe Mangel Wurzel. Similar to the Yellow Globe; productive . . .
$10 \quad 15 \quad 40$

278 Yellow Ovoid Mangel Wurzel. Of distinct shape; one of the most productive sorts . . . . . . . . . . . . . . $10 \quad 1530$
279 Giant Yellow Intermediate. Very large . . . . . . . . . . . . . . . . . $10 \quad 15 \quad 40$
280 Golden Tankard Mangel Wurzel. Bright yellow; handsome and sweet, and very productive
$10 \quad 15 \quad 40$

283 Mammoth Long Red Mangel Wurzel. Very large selected strain . . . . . .
284 Mammoth Golden Mangel Wurzel. Like above, save in color . . . . . . .
286 Lane's Sugar. For sugar making or stock feeding .
290 White Sugar Beet. Grows to a large size, and is useful for making sugar as well as for stock feeding . . . . .
293 Vilmorin's Improved Sugar. A much improved strain of the preceding; very valuable as a sugar-producing Beet. .
294 Austria Electoral Wohanka Sugar Beet. This variety is said to contain more saccharine matter in proportion to bulk than any other sort .
$10 \quad 15$

## Broccoli.

Broccoli. Broculi. Spargelfohl.

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

The following are sorts best adapted to this climate, and the only ones which succeed generally. We recommend No. 307 as the most certain.


# Brussels Sprouts. 

Chou de Bruxelles. Berza de Brusels. Rofenfohl.

Cultcre.-Sow in May, in the same manner as Cauliflower, and transplant in July, one foot apart in the rows, which should be one and a-half feet apart. In gardens both large and small, Brussels Sprouts are without exception the very best winter vegetable that can be grown. Not the least valuable point connected with the Brussels Sprouts is that it is as hardy as the common curled Greens. The common Cabbage is hardy enough in a young state, but when full grown and hearted, frost soon destroys the largest heads, which rot and fall to pieces. Not so the Brussels Sprouts; being small and hard, it is not in the least affected by frost. The real Sprout is not much larger than a marble, and as firm and hard almost as the stalk itself. These are the sort which cooks prefer; they strip off the outer covering, cook them whole, and serve them up artistically in that fashion. When cooked through and no more, such Sprouts melt in the mouth, like the tenderest Cauliflower, and are equally as good. If more widely known, the Brussels Sprouts would be as popular as they are valuable.
318 Best French or Roseberry. Very Peroz. Per $1 / 4 \mathrm{lb}$. Per lb. good . . . . . . . . . . . . . . . $\$ 020 \$ 060$ \$2 00
319 Improved Half Dwarf. The very best and surest strain . . . . . . . $25 \quad 75 \quad 250$
320 Improved Dwarf. Compact heads of fine quality
$20 \quad 60 \quad 200$


## CARROT

Carotte. Zanahoria. Möhrer.

Culture.-Sow No. 321 as early as the ground can be worked; or for late crop, until latter part of July.


DANVERS CARROT. For main crop, sow from the middle of May to 1st of July. Thin out early crop to five inches in row; main crop six to seven inches; the rows ten inches apart for early crop, fourteen for main crop. Hoe often and deeply between the rows. Soil, light sandy loam, richly manured and deeply dug. Sow at the rate of two pounds to the acre.

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.
321 Extra Farly Forcing. Tender
and fine; best for early and late crops and frames.
$\begin{array}{llllll}\$ 0 & 10 & \$ 0 & 30 & \$ 1 & 00\end{array}$
322 New French Bellot. In size be-
tween 321 and 324 . Very early and tender. A most valuable strain for forcing or out of doors.
324 Early Scarlet Horn. Very thick roots . . . . . . . . . . . . .
326 Half-Iong Pointed. A very well known strain; productive, early, and a valuable standard sort . . . . . . . . .
328 James' Intermediate. Productive half-long pointed strain. .

[^0]$20 \quad 50 \quad 150$
$10 \quad 25$
75
$10 \quad 25 \quad 75$

10
75
10
10
10
10
10
10
10
10
10
10
75
$25 \quad 75$

75
100
100
75
75
75
75

## Cabbage.

Chou. Berza de repollo. Kohl.
Culture.-Soil for Cabbage should be rich ana heavy loam, with good drainage. On such a soil, with an abundance of stable or Thorburn's Complete manure, excellent crops are sure to be grown. For early spring sow in fall, not too early, or the plants are liable to bolt in the spring instead of heading; in a month the plants will be fit to transplant to cold frames, where they are wintered, taking care in planting, to set the young plants down to the first leaves. Trans plant in spring as soon as the ground can be worked, setting the plants two feet apart one way, and from twelve to eighteen inches the other, according to the variety. If it is desirable to economize space, Lettuce or Radish may be sown between the rows, as they will be out of the way before the Cabbages need the room. For late or winter crops the seed is sown in May, and the plants set out in July. In this case they are set in rows two by three feet, so as to work them with a horse and cultivator. To destroy the green worm


EARLy JERSEY WAKEFIELD. that is so destructive to the leaves and heads of Cabbage and Cauliflower, an experienced grower says: "Take one ounce of saltpetre and dissolve it in twelve quarts of water; then take a short-handled whisk broom, dipit in the solution and sprinkle the plants well. One application is sufficient unless the stuff is washed off by heavy rains. The liquid being perfectly clear, never colors the Caulitlower or Cabbage heads." To prevent the turnip flea attacking the young plants, sift fine air-slaked lime or tobacco dust over them as soon as they appear above ground.

| Peroz. Per $1 / 4 \mathrm{lb}$, Per lb. |  |  |
| :---: | :---: | :---: |
| \$0 20 | \$0 50 | \$150 |
| 15 | 40 | 125 |
| 15 | 40 | 125 |
| 30 | 80 | 300 |
| 20 | 50 | 150 |
| 20 | 50 | 150 |
| 20 | 50 | 150 |
| 20 | 50 | 150 |
| 40 | 125 | 400 |
| 30 | 80 | 300 |
| 30 | 80 | 300 |
| 25 | 75 | 250 |
| 20 | 60 | 200 |
| 25 | 75 | 250 |
| 25 | 75 | 250 |
| 25 | 75 | 250 |
| 50 | 175 | 600 |
| 25 | 75 | 250 |
| 20 | 60 | 200 |
| 20 | 60 | 200 |
| 25 | 75 | 250 |
| 80 | 225 | 800 |
| 40 | 125 | 400 |

## CARDOON.

## Cardoon. Cardo. Carbon.

Culture.-Sow early in spring, in rows, where they are to stand, and thin them to one foot apart. When full size, bind the plants together with straw or matting, and earth up like Celery to blanch. The stems of the leaves are used for salads, soups and stews.

Per oz.
480 Large solid. Grows about four feet high; leaves nearly free from spines. . $\$ 040$

## CAULIFLOWER.

Chou-Fleur. Colifor. Blumenfohl.

Culture.-This is the same as for Cabbage, except that extra manure and plenty of water will pay upon
this. If the soil be dry, water frequently, and if the plants could have a heavy mulch of hay or straw, it would keep the soil moist, and the plants would not suffer from drought. The early kinds should be strong enough to plant out not later than the middle of April; the late kinds may be planted out same time as for Cabbage. To destroy the Cauliflower maggot it is recommended to take one ounce of sulphuret of potassium and dissolve it in one gallon of water. Heat the liquid to about 100 degrees, take a large spoon or something that will hold 100th part of a gallon, and pour the liquid against the stalk of the plant just above the ground.
482 Extra Farly Dwarf Er-
furt. Short stem; very
fine . per packet, 50 cts. $\$ 600$
Large Early Dwarf Er-
furt. Finest strain . .
. per packet, 25 cts. . . $300 \$ 1000 \$ 4000$
Good Early Dwarf Erfurt. per pkt., 10 cts. . $150 \quad 500 \quad 2000$


THORBLRN'S GILT-EDGE CAULIFLOWER.
Per oz. Per $1 / 4 \mathrm{lb}$. Per lb. for forcing or open ground; small but sure header . . . . . . per packet, 25 cts. . $\$ 250 \quad \$ 900 \quad \$ 3600$
Thorburn Gilt-Edge. Larģe heavy sort; undoubtedly the best and surest of all the sorts now in cultivation . . . . . . . . . . . . . . . . . . per packet, 25 cts. . 35012505000
Extra Farly Paris. Heads of medium size; first-class . . . . . . . . . . . . . . . $75 \quad 2501000$
490 New Taranto. On the style of Autumn Giant; very solid . . . . . . . . . . . . . $40 \quad 125 \quad 500$
492 Lenormand Short Stem. Has very large heads, white and firm . . . . . . . . . 75225900
494 Large Algiers. Popular market gardeners' late sort, of enormous size . . . . . . . $75 \quad 225 \quad 900$
495
497
499 Easly London. Large and hardy
. . . . . . . 40
Thorburn Nonpareil. For late planting . . . . . . . . . . . . . . . . . . . . . . $60-200$
Half-Early Large Erench. Intermediate in maturing . . . . . . . . . . . . . . . $40 \quad 125 \quad 500$
Stadtholder. Intermediate in season; large and hardy . . . . . . . . . . . . . . 40122500
Walcheren. Very late and hardy . . . . . . . . . . . . . . . . . . . . . . . . . . 40
503 Autumn Giant. Vigorous in growth and very large; late . . . . . . . . . . . . . $40 \quad 125 \quad 500$

## Celery.

## Celeri. Apio. Sellerie.

Culture.-Sow the seed in a light, rich, dry border as early as the ground can be worked, in drills eight or ten inches apart, and cover the seeds about a quarter of an inch deep, rolling or treading them in if the ground be dry. When fairly out of the seed leaf, they may be transplanted to another bed, or they may be thinned out to six or eight inches apart and let grow until wanted to plant out in beds or trenches. The beds should be kept well weeded, and an occasional soaking with water in dry weather will do the plants good. Early in July at the north, a month or six weeks later in the southern states, is the proper time to set the plants out in beds or trenches. Press the soil firmly against the roots. In the garden the better way is to set the plants in shallow trenches-we say shallow, for it is obviously a bad plan to remove all the good soil (as must be done in a deep trench), and put the plants in that which is poor. The plants may be set in a single row in a narrow trench, or the trench may be made into a bedwide enough to hold two, three or four rows, and in this case the plants are in a compact form to be covered for the winter where they grow. This will save much labor where there is no root cellar for storage, as often happens to be the case. When grown in beds in this way, the rows should be one foot apart, and the plants about eight inches apart in the rows. A bed four feet wide will take four rows of plants, leaving six inches space on the outside of the first and last row. The bed should be made very rich with thoroughly decomposed manure. The plants will need to be earthed up two or three times; and in doing this, care should be taken not to let the earth get into the heart of the plant. In field culture the plants are set on the surface in rows four feet apart when the Celery is to be earthed up in the field for early use, and two feet apart when the plants are to be taken up

## CELERY-CONTINUED.

and blanched in the cellar for winter use. The plants are set six inches apart in rows. If not grown in beds, the best way to store is to dig trenches in a well-drained spot in the open ground one foot wide, and of a depth a few inches less than the height of the Celery. The plants are then lifted and set closely together until the whole quantity is stored. The edges of the trench should be made sloping from the tops of the plants. When severe cold weather comes on, cover gradually with leaves, hay or straw, and place boards on the top. In such a trench the stalks will blanch perfectly, and may be taken out any time during winter for use or sale as required.

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

## Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.

514 Giant Pascal. A n easily blanched and fine keeping sort of excellent flavor; superior for late use. A selection of Golden Self-Blanching; itself a favorite variety .
. .per pkt., 10 cts. . $\$ 060 \$ 175 \$ 600$
516 Large-Ribbed Kalamazoo. A good half-dwarf white solid Celery

$$
\begin{array}{llll}
20 & 50 & 1 & 50
\end{array}
$$

518 Curled-Leaf White Ornamental foliage.
520 Improved White Plume. A variety with naturallywhite or light foliage; requires but little banking up to blanch; very early and handsome . .
per pkt., 10 cts .

## (So-calledBouquet).

$20 \quad 60 \quad 200$

Perfection Heartwell. The finest and largest of the winter varieties, either for the family or market garden. The heart is golden yellow, and it is of superior quality . per pkt., 10 cts. . $\$ 050$
Golden Dwarf. Of fine, tender quality and handsome appearance . . . . . . . . . 25
$\$ 150 \quad \$ 500$
526
" " California-grown

20
Boston Dwarf. Rather dwarf; of superior quality when well grown, as it is in the vicinity of Boston

30
530 " " California-grown . . . . . . . . . . . . . . . . . . . . . . . . . 20
532 Early Arlington. Quite early and large, and blanches rapidly
20
25
534 Crawford Half-Dwarf. Of vigorous growth and excellent flavor 25
538 Golden Self-Blanching. A fine solid variety on the style of White Plume, except that it is golden yellow where the Plume is white ; very ornamental in contrast with the latter . . . . . . . . . . . . . . . . . . . . . . . . . . per pkt., 10 cts.

50
$150 \quad 500$
andringham Dwarf White. Solid and of good flavor; a favorite sort with market gardeners in some localities

20
542 Covent Garden Red. Of strong growth and good flavor, as the pink varieties generally are; they are worthy more extended use
$25 \quad 75 \quad 250$
545 Clayworth Prize Pink. A famous red sort . . . . . . . . . . . . . . . . . . . 40
546 Celeriac or Turnip-Rooted. Has edible roots, which are used for soups and stews. 20
" Thorburn Giant. The best of the class; very large and fine roots of superior quality.

30
550 "Apple. Has small foliage and globular smooth roots; small. 20

## CHERVIL.

## Cerfeuil. Perifollo. Benjenlaud.

Cclture.-Cultivate and use like Parsley. Sow at any time in the spring, in shallow drills, one foot apart. The seed of the Tuberous Chervil should be sown in August or September, and treated like the Carrot.

## Peroz. Per $1 / 4 \mathrm{lb}$. Per lb

552 Curled. The leaves of this are used for flavoring soups and stews, and for garnishing, same as Parsley
$\begin{array}{lllll}\$ 0 & 10 & \$ 0 & 30 & \$ 1\end{array} 00$
553
Tuberous. A variety which has edible roots . . . . . . . . . . . 20

20 250


WITLOOF.

## CHICORY.

## 555

Common or Wild. Used in Barbe de Capucin, a salad much made
in France. Sown in June, the roots are transplanted in autumn into sand in a cellar. The young shoots form the Barbe de Capucin. \$0 $\begin{array}{llllll}10 & \$ 0 & 30 & \$ 1 & 09\end{array}$ 5556 Witloof. Sow in June; plant the roots one inch apart, from October to the closing of the ground, in rows eightinches apart, in a trench one foot deep; cut off the leaves. Cover the roots with well-sifted soil eight inches thick, and the whole with a good layer of dung two to three feet thick. The Witloof will be produced three weeks afterwards in the intermediate cover of soil. Excellent as a salad as well as a vegetable . . . . . . . . . . . . . . . . .

## Collards.

Chou Cabu. Cabu. Blatterfohl.

Culture.-Sow seeds as for Cabbage, in June, July and August, for succession. Transplant when one month old, in rows a foot apart each way, and hoe frequently.

Peroz. Per $1 / 4 \mathrm{lb}$. Per lb .
559 Georgia-Grown . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 010$ 10 \$30 $\$ 180$

## Corn Salad, or Fetticus.

Mache. Macha o Valerianilla. Stedfalat.

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

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.


## Cress.

Cresson. Berroo Mastuerzo. Kreffe.
Culture.-Sow Nos. 569 and 571 thickly, in shallow drills, €very two or three weeks. No. 569 should be cut often, and it will continue to grow. It is useful not only for salad, but for the breakfast table and for garnishing. Nos. 575 and 578 should be sown in damp soil; or if a stream of water can be utilized, they would be much finer; they will also thrive well in damp hot-beds. Rightly managed, their culture is very profitable. To obtain early salad, it is a good plan to sow with water cress seed a strip four inches wide on the outer margin of a hotbed, inside the frame (where it is always cool). This will be found a satisfactory method of obtaining it early.


# Corn, SWEET OR SUGAR. 

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

## EXTRA EARLY.

Per Per Per Per Per 579 Extra Early Cory. A ear. qt. $1 / 2 \mathrm{pk}$. pk. bu. very early variety, with good sized ears and large grains; excellentformarket $\$ 005 \$ 020 \$ 060 \$ 100 \$ 400$ 580 Northern Pedigree.

Very early and very dwarf; small ears . $\quad \begin{array}{lllllllll} & 5 & 30 & 75 & 1 & 25 & 5 & 00\end{array}$
581 Marblehead. One of
earliest; dwarf and short thick ears; of short thick ears; of
good quality for an early sort . . . . . $\quad 5 \quad 20 \quad 60 \quad 100 \quad 400$ 582 Minnesota. Nearly as early as Marble-
head; of dwarf early as Marble-
head; of dwarf growth
583 Perry Hybrid. Very early and of large size; most valuable for market.
585 Narragansett. Small ears; grains red when fully ripened
590
Extra Early Adams. Not a sugar corn, but largely grown for early use .

SECOND EARLY OR INTERMEDIATE.



[^1]Gentlemen: I have used your seeds for the last thirty-five years, and fail to call to mind a single instance of failure to germinate perfectly or failure to come true to name. This I consider as unusual and I can congratulate you upon the fact. My father used seeds purchased of the originator of your house-Grant Thorburn. With best wishes, I remain yours, etc.,

JAMES F. HOWELL.

## CUCUMBER.

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


#### Abstract

Per oz. Per $1 / 4 \mathrm{lb}$. Perlb.


663 Thorburn's New Everbearing. Small sized; very early and enormously productive, and valuable as a green pickler . . .per pkt., 10 cts. . $\$ 150$


## ENGLISH CUCUMBERS FOR FRAMES.

## Concombre (especes Anglaise) pour couches.

榢 Packets contain from five to fifteen seeds each, according to sort.
Culture. -The following are for growing in hot-beds, or houses particularly constructed for forcing, so that a supply can be furnished during the winter months, at which time the prices are very remunerative. Sow seeds in October, November or December, according to the time they are wanted, in small pots, in fibrous loam, lightened and enriched with old manure, taking care to give plenty of air and water. Robustness of habit is especially valuable in winter, and, therefore, the soil should not be too light. Plunge the pots in a frame near the glass, where there is a little bottom heat, covering with a sheet of brown paper till the seeds

## Thorburn's New Everbearing Cucumber.

Messrs. J. M. Thorburn \& Co.
Dear Sirs: The new Cucumber is something of a wonder in its way. Cucumbers began to form when the plants were about a foot long, and they have continued fruiting abundantly all summer. It looks now as if nothing but a sharp frost would stop them. Owing to its great yield, it seems to me that the new Cucumber will be invaluable to the man who grows pickles. Ijudge that the Early Russian (which I first distributed) is one of its parents. At all events, it is a good thing, and has doubtless "come to stay."

Yours truly,
PETER B. MEAD.

## CUCUMBERS-CONTINUED.

germinate. Afterwards uncover, and ventilate to ensure sturdiness of habit. More seeds should be planted than the number of plants required, as some may fail to grow, and others that germinate may be weaklings. None but strong plants should be employed. It will be necessary to fertilize the pistillate flowers with the staminate, in order to render the vines productive, as, owing to the absence of insects, they will not produce a crop under glass the same as in the open ground.

Per pkt.
699 Bismark. Dark green; fine forcer . . . . \$0 25
\%00 Duke of Fdinburgh. Very large and long; dull green; quite smooth

25
Giant of Arnstadt. Good bearer . . . .
r02 Blue Gown. Handsome black spine sort.
r0s Swan's Neck. 25
r04 Noa's Forcing. Very productive . . . . 25
705 Improved Sion House . . . . . . . . . . $2 \check{~}$
707 Prize Fighter. Standard sort

Per pkt.
$\begin{array}{ll}707 & \text { Prize Fighter. Standard sort . . . . . . } \$ 025 \\ 708 & \text { Goliath. Very prolific . . . . . . . . . . } \\ 25\end{array}$
709 Telegraph. Free bearing, long, and ex tensively grown; handsome

25
710 Iyynch's Star of the West. A distinct
and handsome sort . . . . . . . . . . 25
711 Iancashire Witch . . . . . . . . . . . 25
712 Cuthill's Black Spine 25事Packets of above varieties contain from ten to twenty seeds.
 and one of the most desirable early spring salads. Sow in early spring, in drills half an inch deep and eighteen
inches apart, thin out the plants to twelve inches. Keep early spring, in drills half an inch deep and eighteen
inches apart, thin out the plants to twelve inches. Keep clear of weeds during the summer, and the ensuing spring the leaves will be fit to cut. They are iest, however, when blanched, which makes them tender and destroys to some blanched, which makes them tender and destroys to some
extent their bitter taste without in any way impairing the qualities which make them desirable as greens. The
blanching may be done by placing a couple of boards over blanching may be done by placing a couple of boards over the rows thus: $\bigwedge$. This excludes the light, and improres
the greens, rendering them far superior to those growing the rows thus: $\bigwedge$. This excludes the light, and improres
the greens, rendering them far superior to those growing wild in the grass without cultivation-these are almost sure to be bitter, and are often unsightly and tough.

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.
737 Erench Garden . $\$ 020 \quad \$ 050 \quad \$ 150$
737 Erench Garden . . . . . . .
739 Improved Broad-Leaved. Per-
haps the best sort
$30 \quad 100 \quad 300$

## DANDELION.

Pissenlit. Amargon. Pardeblum.
Culture.-The Dandelion is a hardy perennial plant,

## EgG-PLANT.

## Aubergrne. Berengena. Eierpilanze.

Culture.-Sow in hot-beds, very early in spring, and transplant when two inches high into a second be 1 or into small pots. If that is not done, thin to four inches apart. Do not plant out till the weather becomes perfectly settled and warm. Cool nights or wet weather will check them. Keep some back in frames for a second planting, in case of weather changing unexpectedly. Keep plants watered for a few days if the sun is hot when put out. Set out plants three feet by two.

Per oz. Per $1 / 4 \mathrm{lb}$. Per 1 lb .
740 Early Dwarf Purple. Dwarf; very early; small sized ovoid fruit of good quality . . . . . . . . .
$\$ 030 \$ 0 \quad 75 \$ 250$
741 Long Purple. Of distinct shape and fine quality
$20 \quad 60 \quad 200$
742 Round Purple. Medium, pear-shaped, pale purple; good quality
'743 Improved INew York Purple. The best; large oval purple, and grown very much more extensively than any other sort

30
$85 \quad 300$

4 Black Pekin. Fruit blackish purple, dark foliage.
74́ Scarlet Chinese. Small and ornamental . . . . .
(46 Round White. Small and ornamental
$50 \quad 1 \quad 25 \quad 5 \quad 00$

747 Iong White. Small and ornamental. $\begin{array}{llll}40 & 1 & 00 & 400\end{array}$ $\begin{array}{lllll}40 & 1 & 00 & 4 & 00\end{array}$


## Endive.

Chicoree. Escarola o Endivia. Eubiven.


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

## Peroz. Per $1 / 4 \mathrm{lb}$.Perlb.

## 750 Green Curled Winter. Best for

fall and winter crop . . . . $\$ 020 \$ 050 \$ 150$
751 White Curled. For early use, for which it is useful. . . . . . .
752 Green Moss Curled. Small, clear $\begin{array}{lllll}\text { green leaves, mossy and crisp . } & 20 & 60 & 200\end{array}$
$752 a$ Laciniated. Fine crisp French sort for fall and winter. . . $20 \quad 60 \quad 200$
Broad-Leaved Escarolle. A sweet variety for fall and winter
$20 \quad 60 \quad 200$

## ICE-PLANT.

Ficoide Glaciale. Escarchosa.
Culture.-Sow in good garden soil, as soon as the ground becomes warm in spring, in shallow drills one foot apart. Thrives well in hot dry climates. A desirable vegetable for boiling like Spinach, or for garnishing.

Per pkt. Per oz.
757 Clean Seed \$0 $05 \$ 040$

## Kale or Borecole.

Chou vert Frise. Col. Blätterf́ohl.

Culture.-Nos. 759 to 773 are cultivated and grow exactly like Cabbage. No. 777 sow in September for early greens. Sow No. 780 early in the spring in a hot-bed, and when from one to two inches high transplant into a bed or border that has been highly manured and deeply dug. The plants should stand two feet apart, in rows three feet apart. The soil should be kept mellow and free from weeds. Cover with litter or leaves during the winter. Plants started and grown in this way should be fit to blanch the following spring. The seed may also be sown early in the open border, and transplanted in rows (as directed above), as soon as out of the seed leaf; but they will need to be a year older than the hot-bed plants before being fit to blanch. Sea Kale is not fit to eat till it has been blanched. The plants are blanched either under large pots, or by banking up with sand. The mid-ribs are the parts eaten. They are cooked like Asparagus, and usually served with drawn butter. An occasional top-dressing of salt is beneficial to the plant.

759 Curled Dwarf Green Scotch. Very dwarf and spreading; best strain
" Tall Green Scotch. A taller growth of the above. . . .
" Dwarf Brown. Very hardy
Per oz. Pér $1 / 4 \mathrm{lb}$. Perlb.

768
". Peroz.Per $1 / 1 \mathrm{lb}$.Perlb.
" Tall Brown. Very hardy \$0 $10 \quad \$ 030 \$ 100$ " Mosbach Winter. Dwarf and very hardy . . . .
" Striped and Variegated. For garnishing . . . . " Siberian, Thorburn's Improved. Uniformly dwarf, green curled, and very late and hardy . .
780
Sea Kale. Very fine; resembles Celery in appearance 10

| 10 | 30 | 100 |
| :--- | :--- | :--- |
| 25 | 75 | 250 |
|  |  |  |
| 10 | 25 | 75 |

783 Pe-tsai. (Chinese Cabbage.) Grows like a Cos Lettuce; delicate either cooked as Spinach or raw for salad, best as a fall crop
$40 \quad 125 \quad 400$


# Kohlrabi, or Turnip-Rooted Cabbage. 

Chou-Rave. Colinabo. Kohlrabi.

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

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.
784 Early White Vienna. Handsome and delicate; white ball . . . . . \$0 25 \$0 75 $\$ 250$ 789 Early Purple Vienna. Purple ball; a very good sort . . . . . . . . . larger ball; not so fine, but more productive.
$30 \quad 8$ ェ
300
791 Large White or Green. Forms a

15
50
150

## Lettuce.

Laitue. Lechuga. Salat.
Culture.-Sow Nos. $798,799,805,807$ and 815 in hot-beds in March, and in the open ground as soon as it can be worked, and transplant to rows eight inches apart. Sow in two weeks time same varieties again, as also Cos for a succession. In August, sow any of the varieties, except No. 866, which should be sown in September. In October, some of these may be planted in frames to head in winter and early spring. Always sow thin, and thin out well, or the plants will not be strong. The last spring sowing had better be grown where sown, being thinned out to six or eight inches apart. To have Cos in good order, they must be sown in a hot-bed early in the year and transplanted to a cold-frame, so as to have good plants to set out at the opening of the ground. They require tying for a few days, when grown, to blanch. Lettuce requires good ground and moisture in abundance.
797 Selected Buttercup. Beautiful yellow solid, rather under sized heads, for forcing or out-doors.

Peroz. Per $1 / 4 \mathrm{lb}$. Per lb.
758 White Forcing Eead. Very early; small solid head; one of the best
$\begin{array}{llllll}\$ 0 & 20 & \$ 0 & 50 & \$ 1 & 50\end{array}$
799 Thorburn Market Gardener's Private Stock. A selected strain ; solid large heads, resisting the sun for a long time before shooting up. Valuable also as an early sort, to be started under glass for early spring transplanting into open ground. . .
800 Cold-Frame White Cabbage. For starting in cold-frames and setting out in early spring. Extensively used by market gardeners
801 Large Boston. A fine strain for forcing under glass.
$60 \quad 200$

802 Hubbard Market Lettuce. A large white Cabbage variety; equally valuable for forcing or open ground.
803 French Blockhead. New French sort
20
20
805 Farly, Curled Simpson. A leading early sort; very tender . . . . . . . . . . . .
807 Black-Seeded Simpson. A superior variety; large and of light color
808 American Gathering. Twisted and curled leaves; fine for early and late sowing; very early, and also quite hardy.
810 Laciniated Beauregard. Leaves finely cut; good distinct sort . . . . . . . . . . .
815 Tennisball or Boston, White Seed. A well-known forcing variety; very rapid in growth .
817 Stone Tennisball, Black Seed. Forms close, hard heads; for forcing . . . . . . .
819 Improved Hanson. Large heads.
820 Tomhannock. Distinct; first-rate upright-leaved sort; leaves crimped at the edges
20
825 Shotwell Brown Head. Large and handsome tender heads; very hardy . . . . . .
829 White Summer Cabbage. Close heads of good size; fine for summer ..... 20
837 Golden Stone-Head. A handsome head lettuce; small and solid; for forcing.
20
S40 Salamander Fead. Fine compact heads, which resist the summer heat admirably .
842 Mammoth Large Yellow Butter, Black Seed. Fine market strain
20
845 Large Yellow Butter, Black Seed. Good for main summer or spring crop. . . .
849 Irarge Yellow Butter, Gray Seed. One of the best; large heads
20
853 White Cos, Romaine. Fine if sown very early; requires tying up to blanch . . . .
20
854 Trianon Self-Closing Cos. The finest of all the Cos sorts, resisting warm weather
40
855 Balloon Cos. Very large, hardy; best for late sowing to come to perfection in the autumn

20
866 American Oak-Teaved. Very distinct, and of good flavor . . . . . . . . . . . . .
) $50 \quad 150$

## LEEK. <br> Poireau. Peurro. Porro.

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

Best Large Flag Winter. Hardy and productive . . . . Summer Flag. Not hardy, but useful for autumn

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb $\begin{array}{llllll}\$ 0 & 20 & \$ 0 & 50 & \$ 2 & 00\end{array}$

Large Rouen Winter. A standard sort; remains long in good condition

10
$30 \quad 100$

Large Carentan. A superior variety, with distinct and dark colored leaves: stout in habit and hardy

20
50
200

## MARTYNIA.

(For Pickles.) Gem\{enhorn.

Colt re.-Sow in May, in the open ground, three feet apart in each direction, where the plants are to remain; or the seed may be sown in a hot-bed, and the seedlings afterward transplanted.

Both varieties are productive and fine for pickles. Pick when small and tender, and preserve the same as Cucumbers.
8\%5 Craniolaria
876 Proboscidea

## Mushroom Spawn.

Blanc de Champignon. Seta. Champignonbrut.

Culture, -Mushrooms may be grown in cellars, under benches of greenhouses, or in sheds, wherever the temperature of 50 degrees can be kept up through the winter. The bed should be made from November to February, according to the time the Mush-


MARTYNIA. rooms are wanted, and it requires about two months for them to begin bearing. Secure fresh horse dung, free from straw and litter, and mix in an equal bulk of loam from an old pasture with it. Keep this under cover, taking care to turn it every day to prevent heating, until the pile is large enough to make a bed of the required size. Three or four feet wide, eight inches deep, and any length desired, are the proper proportions for a bed; these may be varied. Prepare the mixture of loam and manure, making the bed in layers, and pounding down each with the back of the spade. Leave this to heat through for a few days, and as soon as the heat subsides to 90 degrees, make holes in the bed about a foot apart each way, into which put pieces of the spawn two to three inches in diameter; fill up the holes with the compost, and at the expiration of a week or ten days the spawn will have thoroughly diffused itself through the bed. Spread a
 layer of fresh soil over the heap to a depth of two inches, and cover with three or four inches of hay, straw or litter. Examine the bed often to see that it does not get dry. When water is given, it should be at a temperature of about 100 degrees.

From experience with French and English Spawn, we find there is an important difference between them. If the manure in the bed is in proper condition, the French Spawn will take hold and grow fully as well as the English; but if the bed is not in the right state, it will often rot. The English Spawn, on the contrary, after starting a little, will remain in a comparatively dormant state for a long time without losing vitality.
Finglish Spawn. 12 cents per lb. ; 10 lbs.
for $\$ 1$; 100 lbs . for $\$ 9$.
French Spawn. Per $3-1 \mathrm{~b}$. box, $\$ 1$; in bulk, per lb., 30 cents.

# Melon, Musk. 

Melon Muscade. Melon. Muscatel. Cantalupen.

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

Peroz. Per $1 / 4 \mathrm{lb}$. Per lb.

## 878 Champion Market.

Large size, slightly elongated, densely netted. Flesh light green and very sweet; a good sort . . . \$0 15 \$0 25 \$0 75
Golden Perfection. Highly perfumed; nearly round,loosely netted, becoming golden yellow when ripe. Flesh pale green, very thick and sugary . . . . . . . . . . . . 30
880 Golden Netted Gem. Very early; small and of fine flavor; green flesh 15
881 The Surprise. Early; oblong, with rich orange flesh of good quality . 15
882 Bird Cantaloup. Productive and very large . . . . . . . . . . . . . . . . . . . . 15
883 Fine White Japan. Early, with light green flesh and white skin . . . . . . . . . 15
884 Jenny Lind. Small, but very early and of good quality; green flesh . . . . . . . . 15
885 Nutmeg. Named from its shape; green flesh, sweet; good for main crop . . . . . . 15
886 Chicago Nutmeg, Of fine quality, and larger in size than the foregoing . . . . . . 15
887. Hackensack. Large, round and of good quality; a popular variety . . . . . . . . . 15

858 Extra Early Hackensack. By careful selection of the earliest, this strain has been fixed to ripen ten days earlier than the Hackensack
Osage (Also called "Miller's Hybrid" and "New Princess"). Cocoanut-shaped, yellow flesh, light green netted skin; good quality
890 Hybrid Bay View. Very prolific and of great size, oblong; green flesh. . . . . .
Skillman Netted. Very early; oval in shape; flesh deep green, sweet and delicious
892 Orange Christina. One of the finest orange sorts; round; very sweet.
$\begin{array}{lll}15 & 30 & 100\end{array}$
15

Ward. Nectar. Small, finely netted, dark green flesh; very early and fine flavored.
895 Delmonico. Oval, deeply netted, large size; orange flesh 15
15

Baltimore Market. Oblong; orange flesh, of fine quality.
15
15

Emerald Gem. Small, extra early; smooth ribbed dark green skin and orange flesh; quality first rate .

15
100
904 Green Montreal. Large, round, netted; flesh thick and light green. . . . . . . . .
913 Long Yellow Cantaloup. Yellow flesh, well adapted for the North
915 Banana Citron. Cucumber shaped, highly perfumed; of indifferent quality
916 Pomegranate. Ornamental; for perfume. 25

| 30 | 1 | 00 |
| :--- | :--- | :--- |
| 75 | 8 | 50 |

917 Mango Melon or "Vine Orange" (Also called "Vegetable Peach"). Size, shape and color of an orange. Thick meaty flesh, somewhat like a preserving citron. Besides its use for preserving or pickling, it can be fried like Egg-plant when partially ripe.
918 Pine-Apple. Medium sized, oval shaped, tapering to stem; slight ribs dark green at first but becoming covered with shallow gray netting. Flesh green, very thick, delicate and exceedingly sweet and high flarored.

## IMPORTED ENGLISH VARIETIES FOR FRAMES:

Varieties Anglaises pour Couches.
928 Invincible Scarlet
930 Monroe's Little Heath. Scarlet flesh ..... 25
931 Dr. Hog'g. Green flesh ..... 25
934 The Squire. Green flesh ..... 25
935 Sutton's Tom Thumb ..... 25

## Melon, Water.

## Melon d'Eau. Zandia, Waffermelonen.

Culture.-Treat the same as Musk Melon, except that they should be planted eight to ten feet apart, according to variety.
950 Vau Cluse Red-Seeded. Very early ; the shape is elongated, with stem and slightly inclined to point. The flesh is bright crimson, very sweet and not stringy. Seeds are quite a distinct red. This is one of the best of recent introductions. Per oz., 15 cts. ; per $1 / 4 \mathrm{lb}$., 30 cts ; per lb., \$1.
Hungarian Honey. A very early sort from Hungary. Fine for northern latitudes; perfectly round; flesh brilliant red, seeds very small; very thin rind and of firstrate quality Peroz.. 15 cts.; per $1 / 4 \mathrm{lb}$.. 30 cts.; per lb., $\$ 1$.


968 Jordan Gray Monarch. Largest melon grown; crimson flesh, fine; late. . .
970 Kolb Gem. Large; bright red flesh of fine quality, and a good shipper
Peroz. Per $1 / / \mathrm{lb}$. Per lb.
$970 a$ Pride of Georgia. Round in shape; large, crisp; bright red flesh. . . . . . . . . $10 \quad 25.75$
971 The Boss. Oblong, dark green; flesh deep scarlet and thin rind . . . . . . . . . . 10 25 75
972 Vick Early. Very early, oblong; bright pink flesh
75
974 Volga. Light pale green skin; a small round Russian melon, with red flesh; late . $15 \quad 30 \quad 100$
975 Dark Icing. Solid, with thin dark green skin; of superior quality; white seed.
976 Scaly Bark. Tough but thin rind; flesh crimson, tender and good; ships well. .
10

978 Mammoth Iron-Clad. Long, very large, late; red flesh; good shipper . . . . .
979 White-Seeded Ice Cream. Very early; red flesh
$\begin{array}{lll}10 & 25 & 75\end{array}$ 25
980 Sibley's Triumph. Long and very large; bright red flesh of first-rate quality.
981 Phinney. Early and of fine quality; red flesh
10
Mountain Sprout. Very early, large and long; mottled skin
984 Johnson Christmas. Keeps late $10 \quad 25$

987 Cuban Queen. Solid and heavy; skin marked regularly; excellent quality 10

Black Spanish. Large, roundish, nearly black; dark red flesh; early . . . . . . . 10
996 Ice Cream or Mountain Sweet. An old and reliable sort; red flesh . . . . . .
10
Florida Favorite. A superior strain; improvement on Rattlesnake; earlier . . .
10
Groodwin Imperial. Crimson flesh, fine quality; small, nearly round; very early
15
10
1025 Southern Rattlesnake. Oblong, dark and striped; bright red flesh
10
1029 Apple Pie or Colorado Citron. Used for preserves; green seed
1030 Citron. Round and handsome, for preserving; red seed . . . . .

- 25

75
75
75
75
75
75
75
75
75
75
75
100
75

## Mustard.

Moutarde. Mostaza. Senf.
Culture.-Sow thickly during early spring, in shallow drills, and press the earth well down. For fall salad, sow in September; or in frames or boxes during winter.

Per oz. Per $1 / 1 \mathrm{lb}$. Per lb.
1035 Black. The seeds form the mustard of commerce . . . . . . . . . . . . . . . . . $\$ 0$ 05 $\$ 0$ 0 10 \$0 25
1036 White London. Leaves used for salad while young; grows very rapidly
1037 White American
$\begin{array}{ll}05 & 10 \text { 2j }\end{array}$
$05 \quad 10 \quad 20$
1039 Chinese Broad-Leaved. Leaves of agreeable flavor when cooked like Spinach . . $10 \quad 25$ \%
1040 Tuberous-Rooted Chinese. A new sort, with Turnip-like root; used for salads.
15
40 1 25

## NASTURTIUM.

Capucine. Maraneula. 27asturtium.
Culture.-Sow as soon as all danger of frost is past, in drills about an inch deep. The tall kinds require fences or poles on which to climb. The seeds are used in flavoring pickles, or as a substitute for Capers.


## ONION.

Oignon. Cebolla. Jwiebeln.


## ONION SETS, TOPS, ETC.

Onion Sets and Tops should be planted near the surface, in drills about twelve inches apart and four inches in the rows. They must have high culture for best results. These last are valuable for early use and where Onions from seed cannot be raised the first year they are essential.

䘺 These are the prices ruling in January; later on they may be higher, owing to shrinkage and rotting.



## OKRA OR Gombo.

## Gombaud. Quimbombo. Safran.


ane apart, where plants are to remain. Thin oùt from nine to twelve inches. They should be well manured. They may also be raised in pots, or a hotbed, and transplanted.

1098 White Velvet. Tender white pods . . . . . $10 \quad 10 \quad 20 \quad 60$
1099 Long Green . . . . . . . . . . . . . . . . . $10 \quad 20$ 50

# Orach or French Spinach. 

Arroche. Armuella.

Culture.-Sow early in spring; cultivate and use like Spinach.
Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.


## Pepper.

Piment. Pimiento. Pfeffer.

Culture.-Sow in hot-beds in March, and when the soil has become warm, set in rows two feet apart and eighteen inches in the rows; hoe frequently, and keep down all weeds. The plants may also be forwarded in small pots.
1108 Sweet Golden Dawn. Very handsome and distinct, and of mild flavor . . . . . $\$ 0 \quad 30 \quad \$ 0 \quad 80 \quad \$ 300$
1109 Giant Emperor. Scarlet; very large and thick. . . . . . . . . . . . . . . . . . . 40 1 25400
1110 Ruby King. Beautiful bright red; large fruit, and mild; one of the best . . . . . $40 \quad 125400$
1112 Large Squash. Productive; much used for pickles. . . . . . . . . . . . . . . . . 30
1115 Iong Red Cayenne. Bright red; very productive . . . . . . . . . . . . . . . . . 30
1117 Long Yellow Cayenne. Similar, save in color . . . . . . . . . . . . . . . . 30
1119 Large Bell. Large and of mild flavor . . . . . . . . . . . . . . . . . . . . . . . . 30
1121 Oxheart. Heart-shaped and of medium size; fine for pickling . . . . . . . . . . . 30
1122 Cranberry. Small fruit; used for pickles . . . . . . . . . . . . . . . . . . . . . . 30
1125 Large Golden Upright. Quite distinct; double the size of Golden Dawn and quite sweet; fine for Mangoes . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 50150000
1126 Brazilian Sweet Upright Mammoth. Bright red; new . . . . . . . . . . . . . $75 \quad 200$ S 00
1127 Thorburn Fancy Red Wrinkled. A new variety; Peroz. Per $1 / 4 \mathrm{lb}$. Perlb. about size of the Cherry Pepper, but distinct in appearance; very pretty .
.$\$ 100 \quad \$ 250 \$ 1000$
1128 Thorburn Fancy Yellow Wrinkled. Differing from above only in color . . . . . . . . . . . . . 10012501000
1130 Red Cherry. Cherry shaped; for pickles, for which they are largely used
30
1132 Red Chili. Very productive; very small, red and very pungent.
30
1133 Yellow Chili. Like 1132, but bright yellow; both these sorts are fine for pickling.

J. M. Thorburn \& Co.:

January 30, 1890.

[^2]
## Peas.

Pors. Chicaros o Guisantes. Erbsen.
Colfure.-A week may be gained in earliness by sowing a quantity in moist sand, placed in a box in the cellar, and planting outside when well sprouted. Light, dry soil, not


THORBURN EXTRA EARLY MARKET PEA.

## EARLY AND MEDIUM PEAS.



## MAIN AND LATE CROP PEAS.

1233 *Dr. McIean. A splendid wrinkled sort for main crop, following Advancer . 3. $\quad 3 \begin{array}{llllllll}30 & 1 & 00 & 1 & 75 & 6 & 00\end{array}$ $1235{ }^{*}$ G. F. Wilson. Very productive, with large and well filled pods . . . . . . . 3 . 25
$\begin{array}{llll}80 & 1 & 50 & 5\end{array} 00$
1237 *John Bull. On the style of Stratagem, but a little taller; delicious pea for main crop . . . . . . . . . . . . . . . . . . . . . . . . . . . . $21 / 2$ 1247 Culverwell Telegraph. Very large pods and peas; of excellent flavor . . 4. $\begin{array}{llll}125 & 2 & 00 & 700\end{array}$

1248 *Carter Telephone. Enormous pods and peas of first-class . . . . . . . . 4 .
$\begin{array}{llllll}40 & 1 & 25 & 2 & 00 & 700\end{array}$

1249 *Ne Plus Ultra. The most popular late pea now in the English market;
superior flavor . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5
1251 White Marrowfat. A favorite; heavy yielder . . . . . . . . . . . . . . . $4 . \quad 20 \quad 50 \quad 75 \quad 250$
1256 Black-eyed Marrowfat. Very hardy and prolific . . . . . . . . . . . . . . 3. 20.50

## PEAS, DWARF VARIETIES-GROW WITHOUT BRUSH.

 1259 *American Wonder. Extra early and productive; fine quality


telephone pea. (See page 32.)
$1260{ }^{*}$ Carter's Stratagem. Mammoth pods and peas of the first-class; sow about six inches apart in the drills . .11/2 $\quad 50 \quad 150 \quad 250 ~ 900$ 1261 *Abundance. L o n g , round, well filled pods; sow thin
. $11 / 2$
$80 \quad 150 \quad 500$

## 1266

McLean's Blue Peter. Early; pods long, peas large
Premium Gem. Extra early; straight pods, well filled

25
$\begin{array}{lllll}80 & 1 & 50 & 5 & 00\end{array}$
1271 *McLean's Little Gem.
Extra early; straight pods .........1. $25 \quad 80 \quad 150 \quad 500$ 1276 Tom Thumb. Extra early . . . . . . . $1.25 \quad 80 \quad 150 \quad 500$
TS Those marked * are wrinkled marrows, and, unless otherwise stated, should be sown thicker than the round Peas, and not till the ground has become warm, as they are more liable to rot. They are the finest flavored of all Peas.

## PUMPKIN.

## Potiron. Calabaza. Grofe Kürbis.

Celture.-May be planted middle of spring, among the Indian Corn, or in the field or garden, in hills eight or ten feet apart each way, four seeds in a hill; in other respects, are cultivated in the same manner as Melons and Cucumbers. Avoid planting them near other vines.

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.
1315 Golden Oblong. Very prolific; growing from 15 to 20 inches long
1320 Large Cheese. Flat; one of the best for family use . . . . . . . $10 \quad 20 \quad 60$
1321 Early Sugar. Fine grained, sweet and prolific . . . . . . . . . . . 10 20
1322 Monmouth County Golden. Thick, fine grained flesh; a valuable canner . . . . . . . . . 10 20
1323 Black Negro. New Hampshire Pumpkin
$10 \quad 20$
20
60
1324 Cushaw. Salmon colored flesh: crooked neck
$10 \quad 25$
$25 \quad \%$
$1324 a$ White Cushaw or Jonathan. A crook-neck variety of excellent quality
10
$30 \quad 100$

1325 Bright Red Etampes. Medi-
um size; flat; fine for cooking $\$ 0 \quad 15 \quad \$ 0 \quad 50 \quad \$ 1 \quad 50$ 1326 Japan Crook-Neck. Fine keeper, of first quality; entirely distinct in fruit, plant and seeds 15

15
30
1327 Improved Mammoth. Immense; smooth and handsome . . . . . 2
132 S Mammoth Tours. French . . . 10
1329 Tennessee Sweet Potato. Bellshaped: thick white flesh; fine for pies

10
30


LARGE ChEESE PUMPKIN.

## Potato.

## Pomme de Terre. Patata. Kartoffel.

Cultcre.-In order to have the best success in growing Potatoes, and to secure a healthy, vigorous growth
 and a crop free from rot, it is necessary to plant as early as the ground can be made ready. Select a rich soil, and plant in rows three feet apart, and the sets one foot in the rows. To kill the young weeds, run a light steeltooth harrow over the field lengthwise of the rows. This will allow the crop to get the start of the weeds, besides breaking up all lumps and leveling the ground ready for the cultivator. If wood ashes and plaster can be procured, sow a good dressing over the field after the Potatoes are up. If a very early crop is desired, it will be necessary to sprout the Potatoes before planting. Cut the Potatoes into pieces of any size desirable, and place in a warm, light room from four to six weeks before required for planting in the open ground. During this time shoots will start out strong and vigorous, so that as soon as planted they will send out roots and grow much more rapidly than those treated in the ordinary way. Another method is to place the sets in a hot-bed two weeks before they are wanted, and then lift carefully and set out on fresh horse dung, so that the heat will cause them to start at once. If the Colorado Potato-beetle makes its appearance, the vines must be dusted with Paris Green, mixed with about eighty parts of plaster; or, what is better, mix the Paris Green in water, two tablespoonfuls to a pail, and apply with a small brush or broom. Take care to stir the mixture often, or else the Paris Green will settle to the bottom. Two or three applications during the season will usually suffice to clear off all the beetles.

These are the prices ruling in January; later in the season many of the priccs may be higher.
EARLY VARIETIES.

## INTERMEDIATE VARIETIES.

| 1366 | Rural New-Yorker No. 2. Very few and shallow eyes; pure white skin and flesh; unexcelled table quality; immense yielder | 50 | 75 | 250 | 500 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1367 | Snow Queen. Flesh and skin very white; a strong and vigorous grower and good keeper | 50 | 75 | 200 | 450 |
| 1369 | Corona Beauty. Early and of fine quality; white skin and flesh | 50 | 75 | 200 | 450 |
| 1371 | Rural Blush. Blush skin, flesh slightly tinged with pink; heavy yielder | 50 | 75 | 200 | 450 |
| 1372 | New Queen. In shape and color resembling White Elephant; fine quality | 50 | 75 | 200 | 450 |
| 1374 | Garfield. White variety; skin finely netted, giving it a beautiful appearance | 50 | 75 | 200 | 450 |
| 1376 | White Star. White flesh, of floury texture | 50 | 7 | 200 | 450 |

## LATE VARIETIES.

| 2 | State of Maine. Very productive; white skin and flesh; free from rot, and of superior table quality | $\check{50}$ | \%) | 200 | 450 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1386 | Empire State. Wonderfully productive; flesh is very white and floury, of most delicate flavor; skin white and smooth. | 50 | 75 | 200 | 450 |

## James M. Thorburn \& Co.'s Catalogue of Seeds.

## POTATOES, LATE VARIETIES-CONTINUED.

| 1388 | Gold Flesh. Late; red skin, yellow flesh; hardy and productive | $\begin{aligned} & 1 / 2 \mathrm{pk} . \\ & \$ 0 \quad 50 \end{aligned}$ | $\$ 0$ \% | $\begin{aligned} & \text { Bus. } \\ & 8250 \end{aligned}$ | $\begin{gathered} \text { Bbl. } \\ \$ 500 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1392 | Thorburn Late Rose. Still retains a fair proportion of its old-time popularity | 50 | 75 | 200 | 450 |
| 1393 | Late Beauty of Hebron. Resembling White Elephant | 50 | 75 | 200 | 450 |
| 1396 | O. K. Mammoth Prolific. Large and productive | 50 | 75 | 200 | 450 |
| 1400 | White Elephant. One of our best; productive, and of first quality | 50 | is | 200 | 450 |
| 1401 | Morning Star. A seedling of Beauty of Hebron; pure white, of first rate quality and an excellent keeper | 50 | 75 | 200 | 450 |
| 1402 | Brownell Winner. Very late; pink skin, and white flesh of first quality: medium eyes; shape much like Early Rose; an immense yielder. | 50 | \% | 200 | 450 |

## PARSNIP.

Panais. Chirivia. paftinafe.
Culture.-Sow as early in the spring as the ground can be worked, in rich soil, in drills eighteen inches
 apart. Thin to six or eight inches in the rows. Hoe and cultivate often to keep down the weeds.
1409 Thorburn Per oz.Per $1 / 4 / \mathrm{lb}$.Perlb ${ }^{\text {© }}$ Island Hollow Crown. A market gardener's strain. \$0 $10 \$ 020 \$ 060$ 1414 Long White. Standard variety . . . . $10 \quad 20 \quad 60$ 1415 Maltese. Notquite as long as Long White; one of the best sorts

10
$20 \quad 60$
1417 Abbott Improved. Smooth and quite large; one of the best......... .
$10 \quad 20 \quad 60$
1418 Early Round. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $10 \quad 20 \quad 60$

## PARSLEY.

Persil. Perijil. petersilie.
Culture.-Soak the seeds a few hours in lukewarm water and sow early in spring and until middle of July, in drills one foot apart. Thin out the plants to four inches. To preserve in winter, transplant to a light cellar or cold-frame. No. 1437 should be thinned out while young, and managed the same as Carrots and Parsnips.

| 1428 | Extra Curled. Superior. . | 10 | 30 | \$1 00 |
| :---: | :---: | :---: | :---: | :---: |
| 1430 | Moss Curled. Very pretty. | 10 | 30 | 100 |
| 1431 | Fern-Leaved. Fine curled | 10 | 30 | 100 |
| 1433 | Beauty of the Parterre. Distinct and most beautiful for edgings, and equally good as a condiment; allow eight inches space between plants. | 20 | 50 | 150 |
| 1435 | Plain. The ordinary form. | 10 | 20 | 50 |
| 1437 | Hamburg or Rooted. Forms edible roots, much like Parsnips . | 10 | 30 | 100 |



## Roquette.

## Roquette. Jaramago.

Culture.-Sow early in spring, in rows, and thin out to eight or ten inches. If kept well scuffled and watered, the tart flavor of the leaves is greatly diminished. This flavor is not pronounced in the small leaves, which are used for salad. The flowers, appearing from May to June, have very much the odor of orange blossoms.

## Radish.

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

的Those marked thus (*) are best suited for market gardeners. Per oz.Per $1 / 4 \mathrm{lb}$. Per lb。 1440 *Turnip Farly French Scarlet. Very early . . . . . $\$ 010 \$ 020 \$ 060$
1442
*Early French
Scarlet Forc-
ing. Crisp and beautiful ; matures in about 20 days . . . . 15



466 6 *Golden Summer. Smooth and bright skin . . . . . . . . 10 25 $\begin{array}{lll}10 & 25 & 75\end{array}$
1468 " *Grey Summer. Good solid summer sort. . . . . . . . .
$10 \quad 25 \quad 75$

1470 Olive-Shaped, Deep Scarlet. Flesh bright and crisp . .

| 10 | 25 | 75 |
| :--- | :--- | :--- |

1472 "White. Mild and fine for summer. . . . . .
1474 " *French Breakfast. Pink and white; early; fine for forcing
$10 \quad 20 \quad 60$

1476 *Long Scarlet Short Top. Very long and crisp; for frames or open ground
$10 \quad 20 \quad 60$

| 1478 | 6 | " *Chartier WhiteTipped. Shades from crimson to white; tender. | 10 | 25 | 75 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1480 | " | *Wood Early Frame. Long, red, crisp and good for forcing | 10 | 20 | 60 |
| 1482 | * | White Naples. Slender; for summer use | 10 | 25 | 75 |
| 1484 | ' | White Vienna or Lady Finger. Crisp and tender in summer. | 10 | 25 | 75 |
| 1486 | 6 | Purple. Very dark.. | 10 | 25 | 75 |
| 1488 |  | e Strasburg Summer. Very rge; the German's favorite . | 10 | 25 | 75 |



## RADISH-CONTINUED.

Per oz.Per $1 / 4 \mathrm{lb}$.Per lb.
1490 *White Stuttgart Summer. Very early and very large . $\$ 010 \$ 025 \$ 075$


## Rhubarb.

Rhubarbe. Ruibarbo. Rhabarber.

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

Per oz. Per $1 / 41 \mathrm{lb}$. Perlb.


## Swiss Chard, or Silver Beet.

This is a Beet producing only leaves, and is excellent used as greens. Cultivate about the same as Spinach, by sowing the seed in early spring, in * drills about a foot apart. As it grows, thin out for use, and keep clear of weeds if success is desired. Good cultivation will increase the delicacy and tenderness of the leaves to a considerable degree.

Per oz.Per $1 / 4 \mathrm{lb}$. Per lb. 1520 Swiss Chard $\$ 0 \quad 10 \quad \$ 0 \quad 20 \quad \$ 060$

## SPROUTS.

Choux Verts non Pommes.
Culture.-Sow No. 1525 very early in spring, and Winter Kale in September. Full directions for growing the latter will be found on page 25, under head of Kale.


## SALsify, or Vegetable Oyster.

Salsifis. Ostion Vegetal. ড̧aferwurjel.



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


## SCOLYMUS.

A vegetable from Spain. The roots resemble a small Parsnip, and will keep through the winter like a Turnip. It is cultivated exactly like the Carrot, except that it should be grown in rows three feet apart and eighteen inches in the rows. It is eaten boiled, like Salsify.

Per oz. Per $1 / 1 \mathrm{lb}$. Per lb.
1535 Scolymus. $\$ 020 \quad \$ 050 \quad \$ 200$

## SCORZONERA.

## Scorzonere. Escorconera. Scorjioumurjel.

Culture.-Cultivate the same as Salsify. It is cooked in the same manner, but on account of being somewhat more difficult to raise, is seldom seen in cultivation. Considered by many superior to Salsify. It is also called Black Salsify.

## Sorrel.

Oseille. Acedera. Sauerampfer.
Culture.-Sow in spring, in drills eighteen inches apart, in a rich soil, and keep the flower stems cut off as they appear. It remains in the ground year after year, and only needs to be taken up and divided once in four or five years. To be cut and cooked precisely like Spinach; or it is excellent cooked with it, one-third Sorrel to two-thirds Spinach. Very nice to be eaten after it has become cool. Inasmuch as the hot sun tends to increase its acidity, a northern exposure is preferable.
1544 Garden
Per oz. Per $1 / 4 \mathrm{lb}$. Perlb.
. $\$ 010 \quad \$ 0 \quad 30 \$ 100$

## Skirret.

## Chervis. Jucfermurzel.

Culture.-Sow in drills half an inch deep, a foot apart; thin out to eight inches in the row; keep down the weeds. Take up the roots before winter, and store in sand or earth. It is a plump, fleshy root, containing a quantity of sugar, and is eaten like Scorzonera or Salsify.

Peroz.
1546 Skirret $\$ 030$

## Setauket, N. Y., Nov. 6, 1890.

Messrs. James M. Thorburn \& Co.
Dear Sirs: Your salesman recommended to me last spring your Thoroughbred White Flint Corn for Long Island land. I have just finished husking three acres planted with it, and have a yield of 427 bushels of ears. The yield is so much better than any previous yield that I wish to thank both him and you.

Yours very truly,

> SELAH B. STRONG,


Madison, N. J., May 2, 1890.
Would like to express my pleasure at the result obtained from one packet of Chrysanthemum seed (50 cents). Fifty plants came up, and very healthy. Most pleasant surprise, for in several other cases different florists only five or six plants. Very respectfully,
E. A. GATTER,

## Spinach.

Epinards. Espinaca. Spinat.
Culture.-Sow in early spring, in drills a foot apart, every two weeks for a succession; and as it grows


LONG-STANDING SPINACH. thin out for use. For fall use, sow in August all the other varieties, and for winter crop in September. Cover that which is left out over winter with straw or leaves, after the weather becomes quite cold. Keep clear of weeds. Sow the seed of New Zealand (which must be scalded and soaked in hot water before sowing) in hills three feet apart each way, three or four seeds in a hill. This is fit for cutting all summer.

|  |  | Per oz. Per $1 / 4 \mathrm{lb}$ Per lb . |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Large Round Viroflay ThickLeaved. Has very large and thick leaves | $\$ 010$ | \$0 15 | \$0 40 |
| 1570 | Round-Leaved. A standard sort | 10 | 15 | 40 |
| 1571 | Lettuce-Leaved. Popular French sort. | 10 | 15 | 40 |
| 1573 | Curled-Leaved Savoy or Bloomsdale. Large tender leaves; fine | 10 | 15 | 40 |
| 15\%5 | Round Flanders. Excellent and productive | 10 | 15 | 40 |

1577 Long-Standing Round ThickLeaved. Dark green; the longest standing before running to seed

| 10 | 15 | 40 |
| ---: | ---: | ---: |
| 10 | 15 | 40 |
| 10 | 30 | 100 |

1578 Prickly. Vigorous and hardy
1579 New Zealand Summer. Distinct; grows well during hot weather

## SQUASH. <br> Courge. Calabaza. Speife Kürbis.

Culture.-Sow in hills, in the same manner and at the same time as Cucumbers and Melons; the Bush varieties three to four feet apart, and the running kinds from six to nine feet apart.
1583 Farly Golden Bush. Fine for summer use; not as early as the White Bush. . . . \$0 10 \$0 25 \$0 75
" White Scallop Bush A good early shipping variety
stripes; variegated
1589 " Summer Crookneck. Yellow fruit; distinct and the best for summer . . .
1589a Summer Crookneck. Long green striped ... . . . . . . . . . . . . . . . . . . .
1590 Egg-Plant Bush Squash. A white-fleshed Bush variety; oval in shape, and said to be suitable for frying like the Egg-Plant. . . . . . . . . . . . . . . . . . . . . cellent summer sort . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
1591 Early Orange Marrow. An improved Boston Marrow. Quite distinct, very early, and of most delicate flavor; suitable either for fall or winter. . . . . . . . . . . .
$\begin{array}{lll}1593 & \text { Boston Marrow. Oval, bright orange; flesh yellow and fine . . . . . . . . . . . . . } & 10 \\ 1594 & \text { Hubbard. Well known and liked for late use; of superior quality . . . . . . . . . . . . } & 10 \\ 1595 & \text { Pike's Peak }\end{array}$
1595 Pike's Peak. (The Sibley.) An entirely distinct sort, with thick bright orange75
flesh; one of the finest winter varieties.
1596 Turban. Orange yellow flesh of good flavor
10

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.
1597 Low Bay State. With hard blue shell, for fall and winter . . . . $\$ 010 \$ 025 \$ 075$ ed flesh; dry and fine for late

10
25
1599 Salem Valparaiso. Large, oblong, bright orange fruit, of a delicate flavor . . . . . . 10 25

10
25
75
1601 Marblehead. Resembling the Hubbard, but has grey skin. 10


SQUASHES.

SQUASH-CONTINUED.
Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.

Thorburn Red Japan Small Turban. Fine small bright red winter sort . . . . $10 \quad 30 \quad 100$
1604 Cocoanut. Of first-rate quality and very prolific 75
White Chestnut. In the form of the Hubbard; fine grained and as dry as a boiled chestnut.
$\begin{array}{lll}10 & 25 & 75\end{array}$
Brazil Sugar. Yellow, warted skin; oblong in shape, and first-rate for summer or fall.
$10 \quad 25$

1608 F'rench Olive. Olive-shaped; golden yellow flesh of good quality
Pine-Apple. Peculiar shape; white skin and flesh; fine late sort.
Canada Crookneck. Small, well known winter sort; green skin

1612 The Warren. A new type of the Essex Hybrid; of superior quality
1613 Mammoth Chili. Grows to an enormous size; rich orange yellow skin and flesh.
1614 English Vegetable Marrow. Oblong, yellow fruit; tender Hesh

10
10
10
10
25
10

75
100
250

## TOMATO.

Tomato. Tomates. Siebesapfel.
Culture.-Sow in hot-bed in early spring, or the seed may be sown in shallow boxes and placed in a win
 dow, where one does not wish to have the trouble of making a hot-bed. Trans. plant to the open ground when all danger of frost is past, setting the plants three or four feet apart each way. Some support should be provided for the vines to keep the fruit from touching the ground; brush, hay or anything of the sort will answer the purpose, or they may be tied to stakes. Fruit may be had several weeks earlier by sowing the seed quite early, and transplanting to small pots; when these are filled with roots, shift to a larger size, and transplant to open ground when weather is warm and settled, shading from sun for a day or so. As the roots are not disturbed in taking plants from the pots, the plants suffer no check, but grow right on.

Skillful cultivators, by selecting and hybridizing, have greatly improved the Tomato.

Thorburn Iong-Keeper. A new and valuable sort. See page 10.

New Jersey. One of the finest sorts; large, solid, smooth, bright red. $\$ 0$| 0 | $\$ 0$ | $\$ 5$ | 85 | $\$ 3$ | 00 |
| :--- | :--- | :--- | :--- | :--- | :--- |

1627 Ignotum. Excellent for family or market use; very prolific; the earliest of the large, deep red, smooth varieties; heavy and solid
$30 \quad 85 \quad 300$
Optimus. Solid and productive; bright crimson
25
16:9 Volunteer. Moderately early; productive and of fair size; bright red
25
75
$30-85 \quad 300$

Beauty. (Livingston's.) Large, smooth; pinkish red; thick flesh and regular form. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
1636 Hovey. Fine red variety; resembles the Acme . 25
25
1 137 Acme. Medium, red; smooth and good . . . . . . . . . . . . . . . . . . . . . . . 25
1639 Fssex Hybrid. Large, shining red; very solid
1640 Early Advance. Bright red; medium sized, smooth, solid; very early. 25

1641 Paragon. Bright red; round and very productive
1643 Trophy, Selected. Very solid and fine in every way; standard late sort.
25
25
Wish Bronze Foliage. Fruit first-class.
30
Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.

Dwarf Champion. Quite distinct in foliage and habit of growth, being compact and upright; fruits early and resembles the Acme in appearance.

30
25
25
25
250
250
250
250

| 75 | 250 |
| :--- | :--- | :--- |
| 75 | 250 |
| 75 | 250 |
| 75 | 250 |
| 75 | 250 |
| 75 | 250 |
| 85 | 300 |
| 85 | 300 |

## TOMATO-CONTINUED.

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.

| $1647$ | Prelude. (Horsford's.) Bright, crimson, round, smooth; rather under size and growing in clusters; first-class sort to grow under glass or out of doors; very early | 30 | 85 | 300 |
| :---: | :---: | :---: | :---: | :---: |
| 1648 | Mikado. Very large, fairly smooth and solid; skin purplish red; has distinct broad foliage. | 25 | 75 | 250 |
| 1649 | Lorillard. A splendid sort for forcing under glass as well as for out-door culture; bright, glossy red, smooth; of fine flavor, and very early | 30 | 85 | 300 |
| 55 | Conqueror. Very early; fruit of medium size | 25 | 75 | 250 |
| 1656 | Hundred Days. One of the earliest | 30 | 85 | 300 |
| 1659 | Yellow Plum. Round and regular; bright yellow; used for pickles | 25 | 75 | 250 |
| 1662 | Iarge Yellow. Large, deeply r | 25 | 75 | 250 |
| 1664 | Peach. Resembling a peach; beautiful for preserves, pickles and exhibition | 25 | 75 | 250 |
| 1668 | Green Gage. Light yellow | 25 | 75 | 250 |
| $16 \% 2$ | Red Cherry. Fruit about an inch in diameter, in bunches; used in pickles. | 30 | 100 | 350 |
| 1675 | Yellow Cherry. Similar to preceding, save in color | 30 | 100 | 350 |
| 1678 | Red Pear-Shaped. Fruit of peculiar shape; handsome and solid | 25 | 75 | 250 |
| 1680 | White Apple. Nearly white | 25 | 75 | 250 |
| 1682 | Red Currant. Very small and handsome; for preserves | 40 | 125 | 400 |
| 1684 | Upright Station Tree. The earliest of all to ripen a small part of its fruit; it grows in a compact manner, and is well adapted for pots . . . per packet, 10 cts. |  | 300 | 1000 |
| 685 | Strawberry (Winter Cherry or Husk Tomato). Small fruit; used for preserves | 30 | 85 | 30 |

## TURNIP.

Navet. Nabo: Rüber.

Culture.-For early Turnips, sow as soon as ground opens in spring. Nos. 1769 to 1777 should be sown from any time in July to 1st of August; but the other kinds, for winter use, may be sown from middle of July to end of August. Turnips are generally sown broadcast, but much larger crops are obtained (particularly of the Ruta-Bagas) by cultivating in drills eighteen inches apart, and thinning to six inches in the drill. Sow one pound to the acre.


## TURNIP-CONTINUED.

| 1748 | Long White Tankard. A good keeper. | 10 | 15 | 50 |
| :---: | :---: | :---: | :---: | :---: |
| 1750 | Yellow Malta. Early and of fine flavor. | 10 | 25 | 75 |
| 1751 | Xellow Globe. Good and sweet; keeps fairly well. | 10 | 15 | 50 |
| 1753 | Yellow Stone. Fine hard winter sort | 10 | 25 | 75 |
| 1755 | Yellow Aberdeen. Hardy, productive and keeps well . | 10 | 15 | 50 |
| 1758 | Golden Ball. Very handsome; keeps fairly well. | 10 | 15 | 50 |
| 1763 | Yellow Finland. Small, early, flat and distinct | 10 | 25 | 75 |
| cla | sort. | 10 | 25 | 75 |
| or st | ock; hardy and prolific . | 10 | 15 | 50 |
| . . | . . . . . . . . . . . . . . . . . . | 10 | 15 | 40 |
| , | . . . . . . . . . . . . . . . . | 10 | 15 | 50 |
| and | keeps well. | 10 | 15 | 50 |
| ock; | firm flesh. | 10 | 15 | 40 |



MILAN STRAP-LEAF TURNIP.

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb. $\$ 0 \quad 10 \quad \$ 0 \quad 250 \% 75$

1750 Yellow Malta. Early and of fine ellow Globe. Good and sweet; keeps fairly well 0

1753 Yellow Stone. Fine hard winter sort Yellow Aberdeen. Hardy, producGolden Ball. Very handsome; keeps fairly well. . . . .......... . . . and distinct

75
1767 Montmagny. Yellow, purple top; first-class sort. . . . . . . . . . . . . . . . . . $10 \quad 25 \quad 75$
$\begin{array}{lll}1769 & \text { Tmproved Ruta-Baga. Good for table or stock; hardy and prolific . . . . . . . . } & 10 \\ 1770 & \text { Champion Purple-Top Ruta-Baga . . . . . . . . . . . . . . . . . . . . . . . . . } & 10 \\ 10 & 15 & 40 \\ 10\end{array}$
1772 White Ruta-Baga. Large and productive . . . . . . . . . . . . . . . . . . . . . 10
1774 Laing Ruta-Baga. One of the earliest, and keeps well . . . . . . . . . . . . . . 10
50
1777 Skirving Ruta-Baga. For table or stock; firm flesh . . . . . . . . . . . . . . 10.1540


Nashua, N. H., Oct. 23, 1889.
Dear Sir: The sample of the Everbearing Cucumber you sent me last spring proved it to be an unique sort. It was the earliest of any, not excepting the Early Premier, while its productiveness, handsome pickling form and continued bearing make it a valuable addition to the list. The housewife will find here the ideal and most accommodating pickle, for fruit of all sizes, perfect in shape, can be had from the vines any time from July to October. We consider it a decided acquisition.
A. H. DUNLAP \& SONS.

Agricultural College, Lansing, Mich., Jan. 18 , 1890.
Messrs. J. M. Thorburn \& Co.
Sirs. The potato (Thorburn) which you requested us to try has proved of most excellent quality and gave a large yield. In the test for quality of fifty-five varieties, it now stands ahead. If you desire further particulars, write me.

SAMUEL L. JOHNSON,
Prof. of Agriculture and Supt. of Farm.


## Seeds of Pot, Sweet and Medicinal Herbs.

| A | $\begin{aligned} & \text { Per pkt. } \\ & . \$ 010 \end{aligned}$ | $\begin{aligned} & \text { Por oz. } \\ & 80 \\ & 50 \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
| Angelica, Garden. Supposed to have medicinal virtues. . Archangelica officinalis | . 5 | 25 | \$2 00 |
| Anise. Seeds aromatic and carminative. . . . . . . . . . Pimpinella Anisum | 5 | 10 | 60 |
| Arnica. Had medicinal qualities . . . . . . . . . . . Arnica montana | 10 | 100 |  |
| Balm. Has medicinal qualities . . . . . . . . . . . . Melissa officinalis | 5 | 40 |  |
| Basil, Dwarf or Bush. Culinary herb . . . . . . . . . . Ocymum minimum | 5 | 15 | 150 |
| " Sweet. Culinary herb, used for flavoring soups, ete. Ocymum basilicum | 5 | 15 | 150 |
| Belladonna. Used in medicine . . . . . . . . . . . . . . Atropa Belladonna. | 10 | 50 | 500 |
| Bene. The seeds yield a good oil. The leaves are used for dysentery and diarrhœa . . . . . . . . . . . . . Sesamum orientale. |  | 20 | 150 |
| Boneset. Has medicinal qualities. . . . . . . . . . . . . Eupatorium perfoliatu | 10 | 75 |  |
| Borage. Leaves used as a salad.. . . . . . . . . . . . . . Borago officinalis | 5 | 15 | 100 |
| Caraway. Seed aromatic . . . . . . . . . . . . . . . . . Carum Carui. |  | 10 | 60 |
| Catnip. Has medicinal qualities. . . . . . . . . . . . Nepeta cataria | 10 | 40 | 400 |
| Coriander. Seed aromatic. . . . . . . . . . . . . . . . . Coriandrum |  | 10 | 75 |
| Dill. Seeds aromatic, pungent and medicinal . . . . . . . Anethum graveolens | 5 | 10 | 75 |
| Elecampane. Has tonic and expectorant qualities. . . . . Inula Helenium | 10 | 40 | 400 |
| Fennel, Sweet. Seeds aromatic.. . . . . . . . . . . . . . Anethum Fœoniculu | 5 | 10 | \% 5 |
| Fox-Glove, Purple. Has medicinal qualities . . . . . Digitalis purpurea | 5 | 25 | 200 |
| Fumitory. " $"$. . . . . Fumaria officinalis | 5 | 30 | 300 |
| Grow Well . . . . . . . . . . . . . . . . . . . . . . . . Lithospermum offici |  | 20 | 200 |
| Hellebore, White. Has medicinal qualities. . . . . . . . Veratrum album | 10 | 300 |  |
| Hemlock. Has medicinal qualities. . . . . . . . . . . . . Con |  | 30 | 3 |
| Henbane. " " . . . . . . . . . . Hyoscyamus niger |  | 20 | 200 |
| Horehound. " - . ............ Marrubium vulgare |  | 30 | 300 |
| Hyssop. " " . . . . . . . . . Hyssopus officinale |  | 20 | 200 |
| Lavender. For oil and distilled water . . . . . . . . . . Lavandula vera |  | 15 | 150 |
| Lovage. Has medicinal qualities . . . . . . . . . . . . Levisticum officinalis |  | 40 | 400 |
| Marshmallow. Has medicinal qualities . . . . . . . . Althæa officinal |  | 30 | 3 |
| Marigold, Pot. Used in soups . . . . . . . . . . . . . . . Calendula officina |  | 15 | 150 |
| Marjoram, Pot. Used as seasoning . . . . . . . . . . . Origanum Onites |  | 40 | 4 |
| " Sweet. " " . . . . . . . . . . . Origanum Majorana. |  | 25 | 250 |
| Pæony. Has medicinal qualities. . . . . . . . . . . . . . Pæony officinalis |  | 15 | 150 |
| Pennyroyal. Has medicinal qualities . . . . . . . . . . . Hedeoma pulegioides | 10 | 60 | 6 |
| Rosemary. Yields an aromatic oil and water . . . . . . . Rosmarinus officinalis |  | 40 | 400 |
| Rue. Said to have medicinal qualities. . . . . . . . . . . Ruta graveolens |  | 15 | 1 |
| Saffron. Used in medicine and also in dyeing. . . . . . Carthamus tinctorius |  | 10 | 1011 |
| Sage, Common. Used as a culinary herb, and also in medicine . . . . . . . . . . . . . . . . . . . . Salvia officinalis. |  | 20 | 150 |
| " Red. Used as a culinary herb, and also in medicine . Salvia Hominum | 5 | 30 | 300 |
| Savory, Summer. Used as a culinary herb . . . . . . . . Satureja Hortensis |  | 20 | 1 : |
| " Winter. " . . . . . . Satureja montana |  | 30 | 300 |
| Tansy. Generally used in bitters . . . . . . . . . . . . . Tanacetum vulgare |  | 30 | 300 |
| Thyme, Broad-leaved English. Used as a seasoning . |  | 30 | 300 |
| French . . . . . . . . . . . . . . . . . . . . . Thymus vulgaris |  | 30 | 3. 00 |
|  |  |  |  |

## FRUIT SEEDS.

Apple Seed, American Per oz. Per lb. ..... $\$ 040$
French Crab. . . . . . . . . . . . . . . . . . . . . . . . . . . . per 100 lbs., \$30 ..... 40
per 100 lbs., $\$ 12$ Apricot Pits per 100 lbs., $\$ 12$ ..... 20
Cherry Pits, Mahaleb per 100 lbs., $\$ 25$ ..... 30
" Black Mazzard per 100 lbs., $\$ 14$ ..... 25
Domestic per 100 lbs., $\$ 8$ ..... 15
Nectarine Pits. per $100, \$ 2$Currants, Red Dutch150
White Dutch. ..... 200
" Cherry. ..... 25 ..... 200
Grooseberry Seed, Red per packet, 15 cents ..... 75
" Yellow per packet, 15 cents ..... 75
Green. per packet, 15 cents . 75
Peach Pits. Crop failed.
Pear Seed ..... 150
Plum Pits, Green Gage. per 100 lbs., $\$ 10$ ..... 20
" Damson, for grafting per 100 lbs., 11 ..... 20
" Myrobolan ..... 25 per 100 lbs., 20
Quince Seed
Raspberry Seed per packet, 10 cents ..... 00150
Strawberry, Mixed.
Red Alpine per packet, 10 cents . 40
per packet, 10 cents . 60400
SEEDS OF HEDGE PLANTS.
Arbor-Vitæ, American
Barberry
Purple-leaved
Broom, Scotch
BuckthornCornelian Cherry
Furze or Gorse
Hawthorn Locust, Honey, or Three-Thorned Acacia
Yellow
Norway Spruce.Norway Spruce
Osage OrangePrivet, JapanCommon EvergreenSheep-Berry (Black Haw)
VARIOUS VEGETABLES USED FOR PICKLES,承 Directions for culture of each will be found under the proper heads. For prices see body of Catalogue.
Beans, Refugee. ..... Galega.Beet, Blood Turnip.Brussels Sprouts, best French.Cabbage, Red Dutch.Cucumber, Green Prolific.Cauliflower, Early Paris.Gherkin.

Melon.
Martynia.
Nasturtium, Tall.
Onion, White Portugal. Queen and others
Pepper, Chili.
Pepper, Celestial

Pepper, Sweet Mountain. Giant Emperor.
Tomato, Yellow Plum.
" Red Cherry.
" Strawberry.
Thuja occidentalis ..... $\$ 200$
Berberis vulgaris. ..... 100
Berberis folio-purpurea ..... 200
Genista scoparia ..... 40
Rhamnus catharticus. ..... 100
Cornus Mascula ..... 100
Ulex Europæus ..... 50
Cratægus Oxyacantha ..... 50
Gleditschia triacanthos ..... 50
Robinia pseud-acacia ..... 50
Abies excelsa ..... 75
Maclura aurantiaca ..... 50
Ligustrum Japonicum ..... 100
Ligustrum vulgare ..... 100
Viburnum prunifolinm
VARIOUS VEGETABLES USED FOR SALADS.
縖 For prices see body of Catalogue
Borage. Corn Salad.
Curled Cress.
Dandelion.

Celery.

Dandelion.
Endive.
Inettuce.
Mustard.

Pepper, Sweet Spanish.
$\qquad$


Perfection Pruning Shears-The Best of All.

[^3]
## Complete Assortment of Kitchen Garden Seeds for Private Families.

Containing the Most approved and Choice Sorts, in Quantities to suit Small and Large Gardens.



## FORMATION OF LAWNS FROM SEED.

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

Perhaps the best description of soil for a lawn is the stiff loam or clayey soils which predominate in so many districts. This ought not to be by any means too rich, as a rapid growth is not wanted in the grasses of a lawn ' but in preparing it for laying down, let the surface be as much alike in quality as possible, and do not stint the quantity of seed. A little White Clover is a useful addition to the seed. A very stiff clay is no better than a very dry sand for resisting dronght, as it is in a measure sealed up against the insertion of roots, and the surface contracting by the withdrawal of moisture, it is liable to crack, etc., to a great depth. Nevertheless, a stiff soil usually makes the best lawn.

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

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

One important thing ought not to be forgotten in the preparation of the ground. Let it all have a surface of about six inches alike, for nothing looks worse than to see a lawn grow all in patches. One exception, however, may be mentioned, and that is, if there be any steep slopes facing the south, or other exposed places, let the earth on them be better and deeper than on the ground level, as they are more liable to burn out. When the grass becomes well established, it should be frequently cut. The oftener you mow, the finer your grass will be

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

To Grass a Bank or Terrace.-For each square rod, take a pound of lawn grass seed and mix it thoroughly with six cubic feet of good dry garden loam. Place in a tub, and add liquid manure, diluted with about two thirds of water, so as to bring the whole to the consistency of mortar. The slope must be made perfectly smooth, and then well watered, after which the paste should be applied, and made as even and as thin as possible.
Fine Mixed Lawn Grass. (Central Park Mixture.) For lawns of any extent, we recommend this, our best mixture, to be sown from three to four bushels to the acre. ( 15 lbs . to bus.) We can also make special good mixtures at lower prices

Per bus., $\$ 3.50$.
French Mixed Iawn Grass. For croquet grounds, grass plats, etc., this mixture is recommended to be sown from three to four bushels to the acre. ( 15 lbs . to bus.) . . . . . . . . Per qt., 25 cents; per bus., $\$ 4.50$.

## Grass Seed.

The best means of improving meadows, pastures and lawns is to sow a sufficient variety of grass seeds, and we trust our customers will give some of the kinds a trial in connection with Timothy, which by many is believed to be about the only grass to be sown.

Q평 Grass mixtures for the formation of permanent pastures, etc., are made to order, according to soil and location.
[守 The prices of some varieties may change as the season advances.
Agrostis canina. (Rhode Island Bent Grass.) A valuable grass for lawns. For lawns, sow three or four bushels to the acre; for pasture, one and a-half to three bushels. See "Formation of Lawns," page 50. ( 12 lbs. to the bus.)

Per lb. ioo lbs.

Agrostis stolonifera. (Fiorin or Creeping Bent Grass.) Valuable as a mixture with other pasture grasses, as it will thrive in moderately moist land on which water does not stagnate. We find it also the best sort for croquet grounds, and small door yards or grass plats. Same quantity as the preceding. ( 15 lbs . to bus.)
Agrostis vulgaris. (Red-Top Grass.). A valuable permanent grass as a mixture in either meadows, pastures or lawns, growing in almost any soil, moist or dry, and standing well our hot climate. Same quantity as above. (14 lbs. to bus.)
\% 50
Fancy Heavy Red-Top Grass, absolutely clean seed
Aira cæspitosa. (Hassock Grass.) A coarse grass, preferring stiff and marshy bottoms, and thriving well in moist and shady woodlands. In England, door-mats are formed of it by the rural cottagers. 30 lbs . to the acre
Aira flexuosa. (Wood Hair Grass.) Delights in high and rocky hills; is of little agricultural value except for sheep pasture. 30 lbs . to the acre.

18
1200
Alfilaria. See Miscellaneous Seeds.
Alopecurus pratensis. (Meadow Fox-tail Grass.) One of the very best grasses for permanent pasture, and thrives to perfection on lands of an intermediate quality as to moisture and dryness. It also stands the high summer heat without burning. 25 lbs . to the acre
$30 \quad 2500$
Alopecurus agrestis. (Slender Fox-tail Grass.) An annual late flowering grass. 20 lbs . to acre
Ammophila arenaria. (Beach Grass.) See Calamagrostis arenaria.
Anthoxanthum odoratum. (True Perennial Sweet Vernal Grass.) For a mixture with pasture grasses, it is valuable on account of its vernal growth, and also for continuing to throw up root foliage until late in the autumn. For meadows its chief merit is its fragrant odor, which the leaves emit when partially dried, thus sweetening hay. It is a vegetable condiment, rather than a grass of much nutritive value. 10 lbs , to the acre when mixed with other sorts
Anthoxanthum odoratum puelli. (Annual Sweet Vernal Grass.) Much smaller than the perennial, and of much less value, lasting one year only. 20 to 25 lbs . to the acre
Avena elatior. (Tall Meadow Oat Grass.) Most valuable for pastures on account of its early and luxuriant growth; it produces an abundant supply of foliage, which is relished by cattle early and late. 50 lbs . to the acre. ( 13 lbs to bus.)...
Avena flavescens. (Yellow Oat Grass.) Will not thrive well when sown alone, but with other species, it becomes desirable for dry meadows and pastures. About $? 5$ lbs. to the acre.
Beach Grass. See Calamagrostis arenaria
Bermuda Grass. (Cynodon Dactylon.) Suitable only to our southern states (where it is very valuable) or the tropics; will not endure frost. On application we will give further information and quotations for larger quantities; to save time, please state number of pounds required
Blue Grass, English. See Festuca pratensis.
Blue Grass, Kentucky. See Poa pratensis.
Bromus pratensis. (Meadow Brome Grass.) Suitable in mixture for high and dry meadows. 30 lbs . to the acre
Bromus inermis. (Awnless Brome Grass.) A valuable forage plant for light dry soils; answers for cutting and feeding in the green state, for pasture or hay; very productive. About 25 to 35 lbs . to acre
Bromus mollis. (Soft Chess.) Suited to sandy land
Bromus Schraderi. (Rescue Grass.) Thrives in any soil, but prefers that which is wet or moist. In England four or five green crops are cut in a year, and every time it is cut another crop shoots from the roots. All kinds of stock eat it freely. 30 lbs. to the acre .
Calamagrostis arenaria. (Beach Grass.) Valuable on the sandy seashore, canal and railroad banks, etc. It serves with its tough, wide spreading and thickly matting roots to form natural and permanent embankments, preventing the drifting of the sand and protecting from wind and waves. Is of no agricultural value
Cynosurus cristatus. (Crested Dog's-tail Grass.) A valuable grass for sheep pastures, on dry, hard soil and hills. It belongs to the family of lawn grasses. 25 lbs. to the acre.

## GRASS SEED-CONTINUED.

Per
Dactylis glomerata. (Orchard Grass.) Less exhausting to the soil than Timothy, and will en- Per lb. 100 lbs. dure considerable shade. It blossoms about the same time as Red Clover, making it on that account a desirable mixture with that plant; it is exceedingly palatable to stock of all kinds, and its powers of enduring the cropping of cattle commend it as one of the very best pasture grasses. 3 bus. to the acre. ( 14 lbs. to bus.)
$\$ 0 \quad 20 \quad \$ 16 \quad 00$
Dog's-tail. See Cynosurus cristatus.
Festuca duriuscula. (Hard Fescue.) Not very productive, but it is of a very fine quality, and thrives well in dry situations where many other grasses would fail, thus making it a desirable pasture variety. 30 lbs . to the acre .

1200
Festuca elatior. (Tall Fescue.) Succeeds best in moist, alluvial and strong clay soils, and in shady ravines; on moist rocky sea-coasts is considered one of the most valuable pasture grasses; it is a fortnight later in ripening than $F$. pratensis. 40 lbs. to the acre .
$25 \quad 2000$
Festuca heterophylla. (Various-leaved Fescue.) A very early grass, native to Germany. A valuable sort for permanent meadows and pastures on high ground. 40 lbs . to the acre .
Festuca ovina. (Sheep's Fescue.) Grows freely when in high, dry and open pastures. Its chief merit for sheep pasture is that it occupies land which better grasses refuse; grows from 6 to 10 inches high. 35 lbs . to the acre
Festuca pratensis. (Meadow Fescue or English Blue Grass.) A highly valuable species for permanent grass land. It does not, however, attain to its full productive power till the second or third year, when it far exceeds most other sorts in quantity of its produce and nutritive matter. It is relished by live stock, both in hay and pasture. 40 lbs . to the acre
Festuca rubra. (Red Fescue.) The essential distinction of this Fescue is its ereeping roots, which, in dry and sandy soils, are of ten as strong as those of the common Couch Grass. Well adapted for gravelly banks and dry slopes. 25 lbs. to the acre
Festuca tenuifolia. (Slender Fescue.) Flourishes well on dry and sterile soils. It is well suited for large bleaching greens, lawns, etc. 30 lbs , to the acre .

## F'ox-tail. See Alopecurus agrestis.

Holcus lanatus. (Meadow Soft Grass.) Inferior to many other sorts, but has the merit of easy culture, and accommodates itself to all descriptions of soils, from the richest to the poorest. 4 bus. to the acre. ( 7 lbs . to bus.)
Fungarian Grass. See Panicum Germanicum.
Johnson Grass. See Sorghum Halepense, page 53.
Lolium Italicum. (Italian Rye Grass.) One of the most valuable grasses in Europe, being equally suited to all climates. In England it is considered the best known grass to cut green for soiling, affording repeated large and nutritive crops. We recommend it here for use in pasture mixtures. 50 lbs . to the acre.
Lolium perenne. (English Rye Grass.) Is the staple grass of Great Britain, entering largely into the composition of many of the richest meadows and pastures. Its natural adaptation to almost all cultivated soils, and its early maturity, are the reasons it has hitherto been so extensively cultivated in preference to many other equally nutritious sorts. 60 lbs , to the acre
Oat Grass. See Avena elatior.
Orchard Grass. See Dactylis glomerata.
Phalaris arundinacea. (Reed Canary Grass.) Grows well by the side of rivers, alluvial marshes, ditches, etc. 25 lbs. to the acre.
Panicum Germanicum. (Hungarian Grass.) One of the most valuable annual soiling plants. It will grow in any ordinary soil, withstands drought well, and in this latitude may be sown as late as the first of July, and yet produce Per 1 Per a large green crop. $1 \frac{1}{2}$ bushels to the acre. Per 1 lb . 100 lbs. (48 lbs. to bus.) . . . . . . . . . . . $\$ 010 \$ 250$
Phleum pratense. (Timothy.) A grass so well known needs no description, except that, for a hay crop on moist, peaty, or clay soil, it will produce a larger crop than any other sort. It is not so well suited for light, sandy soils. $1 / 2$ bushel to the acre. ( 45 lbs. to bus.)
Price variable, from $\$ 2.50$ to $\$ 3.50$ per bus. .
Poa aquatica. (Water Meadow Grass.) This is an excellent pasture grass for very wet situations, where it will serve a useful purpose. 20 lbs . to the acre.
Poa compressa. (Canada Blue Grass.) Differs from the Kentucky variety in its flattened wiry stems. By reason of its creeping rootstalks it forms a fine turf; recommended in all pasture mixtures on dry soils, and thrives well on clay or hard trodden and poor soil
Poa nemoralis. (Wood Meadow Grass.) The early growth of this grass in the spring, and its remarkably fine, succulent and nutritive herbage, recommend it strongly for pastures. Thrives well under close feeding, and is very valuable. 30 lbs . to the acre


## GRASS SEED-CONTINUED.

Poa pratensis. (Blue Grass.) It is also known as Green Grass, June Grass, etc., and thrives on a variety of soils, but does best in dry and somewhat shady locations. It requires several years to become well established in the ground as a pasture grass. Very valuable for the southern states, as it will stand the hottest summers. $11 / 2$ bushels to the acre. It is also a most valuable grass for the lawn, for which purpose from three to four bushels of clean seed to the acre should be sown. ( 14 lbs. to bus.) Fancy cleaned seed

30
2400
Poa trivialis. (Rough Stalk Meadow Grass.) The superior product of this grass over many other species, its highly nutritive qualities, and the marked partiality which oxen, horses and sheep have for it, are merits which distinguish it as one of the most valuable of those grasses which affect moist, rich soils and sheltered situations. 20 lbs . to the acre
Red Top, See Agrostis vulgaris.
Rhode Island Bent Grass. See Agrostis canina.
Rye Grass. See Lolium.
Sweet Vernal Grass. See Anthoxanthum odoratum.
Texas Blue Grass. See Tricodia stricta.
Timothy. See Phleum pratense.
Tricodia stricta. (Poa arachnifera.) A most valuable perennial pasture grass for the south, lasting indefinitely. A much more rapid grower than the Kentucky Blue Grass. Has proved hardy as far as Kansas. The seed is very lightabout 7 lbs. to the bushel ...Per lb., $\$ 3$; per oz., 25 cents

## Clovers.

## Per lb

Alfalfa. (Lucerne.) This is the same as Lucerne. It requires a deep rich soil, and in such will produce several crops every season. 10 to 15 lbs . to the acre
$\$ 0 \quad 25 \quad \$ 1500$
Alsike Clover. (Trifolium hybridum.) Resembles in growth, duration, etc., the Red Clover; thrives well in cold, wet and stiff soils. 10 lbs . to the acre..
Bokhara Clover. (Melilotus alba.) A most valuable sort for soiling. It grows from three to five feet high, and if sown in rich soil, may be cut three times; lasts two years or more if cut before flowering; good for ensilage and bees. 10 lbs . to acre.
Crimson Clover. (Trifolium incarnatum.) An annual with crimson flowers. Sown late in the summer it furnishes an early green fodder the following season; excellent for soiling. 20 lbs. to the acre.
Japan Clover. See Miscellaneous Seeds, page 52
Kidney Vetch, or Sand Clover. (Anthyllis Vulneraria.) A deeprooted herbaceous hardy perennial plant, valuable for dry sands and inferior soils, upon which Red Clover will not thrive. Eaten with avidity by sheep, cattle and horses. Useful in mixture for dry soil. Produces abundantly of hay and seed. Sow 20 lbs . of seed per acre
$25 \quad 1900$
$30 \quad 2500$

Large Red or Pea-Vine Clover. (Trifolium pratense.) The English Cow Grass; for plowing under . . . Price variable .
Medium Red Clover. (Trifolium pratense.) Is a perennial, but of very few years duration; nutritious, and valuable in moist locations

Price variable
White Clover. (Trifolium repens.) Valuable for lawns and pastures.

25
1900
Yellow Trefoil. (Medicago lupulina.) May be cultivated either alone or with other grasses. Requires about the same treatment as Clover; 15 lbs. to the acre Per $\$ 0.25 \quad \$ 1600$

## BIRD SEEDS, ETC.

(2) Prices variable.
Canary. (Phalaris Canariensis) . . . $\$ 0$ 10 10 Per $\$ 500$

Mixed Canary Seed. . ........ $10 \quad 10$| 0 | 00 |
| :--- | :--- | :--- | :--- |
| 0 |  |

Hemp. (Cannabis sativa.) ....... 10 5 00

Iettuce Seed. . . . . per oz., 5 cents . 30
Maw, Blue Poppy. (Papaver Rhoeas). 15
Millet, American. (Panicum miliaceum) 10
White French 15
" Red French 20

300
800
300
Rape, English. (Brassica Napus) . . $\$ 0$ (15 $\$ 800$
Per lb. Per 100 lbs .
"G German. 6 . . $10 \quad 700$
Rough Rice. (Oryza sativa) . . . . . 151000
Vetches for Pigeons . . . . . $10 \quad 600$
Prepared Food for Mocking Birds
per bottle, 35 cents
Cuttle-Fish Bone . per pound, 40 cents
Sunflower Seed for Parrots. . . . . . 12
700
ESCULENT ROOTS AND PLANTS.

Asparagus Roots, Conover's Colossal
Doz. Per 100.
(two years old) per $1,000, \$ 7$
per bunch, 25 cents
Chufas or Earth Almonds, per qt., 30c.
Horse-Radish Roots

Jerusalem Artichoke
...... per qt., 20 cts.; per bus., $\$ 3.50$
Rhubarb Roots each, 10 cts. . $\$ 100$
Sea Kale Roots . . . . . . . . . . . . . . . . 125
Tarragon Plants (Estragon)... each, 30 cts.25

## Cereals.

*** Grain in quantities of one-half bushel and upward should be shipped in canvas bags, which we can supply at following rates: one-half bushel, 15 cents; one bushel, 18 cents; twobushels, 20 cents. Customerswill please add cost of bags to remittance when ordering.

腰 The prices of some varieties may change as the season advances.
BARIEY. (48 lbs. to bushel)-
Per qt. Per bus.


LONG WHITE FLINT OR SANFORD.

Hulless. Has no hull, or husk, and considerably resembles wheat, except that the grains are about double the size of the largest wheat

25
BUCKWHEAT. (48 lbs. to bushel)-
American Silver Hull. Earlier and more productive than the common.

15

## European Silver Hull

$15 \quad 125$
Dark Glazed. From Vermont
15
New Japan. Enormously productive; the grains are much larger than any other variety
15) 125

CORN. ( 56 lbs. to bushel.) All north- Per ern raised sorts- ear
Blunt's Prolific. Valuable sort for fodder .. . . . .............
Chester County Mammoth. Very large, late, yellow Dent . . . . . .
Early Yellow Canada. (Flint).
$\$ 005 \quad \$ 015$
$\$ 175$

Golden Dent. Farmer's favorite .

| 05 | 15 | 1 | 75 |
| :--- | :--- | :--- | :--- |
| 05 | 15 | 1 | 75 |

Golden Beauty. (Dent.) Large and productive
Hickory King. Large grain and small cob; white Dent. . . . . . .
King Philip. Early dark yellow Flint.
Long White Flint or Sanford

| 05 | 15 | 1 | 75 |
| :--- | :--- | :--- | :--- |

Longfellow. (Yellow Flint.) Small cob and large grain
$05 \quad 15 \quad 175$
Tong Yellow. (Flint.) The standard sort
$\begin{array}{llll}05 & 15 & 1 & 75\end{array}$
Mammoth White Surprise. Is very large, dented; deep grain. . .
Mastodon Dent. Very early, strong growing corn with exceedingly large ears and grain.
$0515 \quad 1$ 75
Queen of the Prairie, Very early Dent; Eastern grown. . . . . . . . . . . .
Rural Thoroughbred White Flint. Of spreading habit; not more than one kernel should be grown in a hill. Its great suckering habit, breadth of blade, and smallness of stock recommend it as a fodder plant, while for ensilage purposes it is most valuable.
Virginia Horse-Tooth. For fodder.
White E'lour Corn
Sweet Eodder Corn. (Measured bushel.)
Pop-Corn
In ears, per lb., 10 cents
OATS. (32 lbs. to bushel)-
Welcome. Heavy white grain; very productive
Clydesdale. Very early and remarkably heavy white oat
Prince Edwaxd's Island Black

## Canada White

RYE. (56 lbs. to bushel.)
Spring
Winter Excelsior 15
EAT. ( 60 lbs . to bushel.) -
Armstrong or Landreth (Beardless). Winter
Farly Red Clawson. Earliest of all winter wheats. 25
Golden Cross. A favorite winter sort. $\therefore 0$
Rural New-Yorker Cross-Bred and Hybrid Wheats. See page 51.
Mrichigan Bronze. Heavy red grain. Winter
Mediterranean Winter15

Horsford's Pearl. Light amber grain (beardless). Winter.20

New York Spring. Spring10
20
White Russian (Beardless). Springis

## Cross-Bred and Hybrid Wheats.

## With Strong Stems; Hardy and Prolific.

Mr. E. S. Carman, the editor of The Rural New-Yorker, began his work of improving wheats some fourteen years ago. The first step taken was to secure the leading varieties of this and other countries and test them side by side in small plots. After testing in this way some 200 so-called varieties, that known as Armstrong, a beardless, white-chaff variety, with amber grains, was selected for the mother plant. Crosses have been made during the past ten years, but only those showing character have been retained.

Nos. 2 and 3 are hybrids between rye and wheat, though the rye blood does not manifest itself in any way. They are in appearance pure wheats. The others are pure wheat crosses.

Mr. Carman's collection of crosses and hybrids, as estimated by those who have seen them, is not approached by any similar collection in the world.

The crop of these crosses and hybrids was last year so limited that they were offered (under numbers) in very small quantities, and at an almost prohibitive price, viz. : 25 cents for 25 seeds. Permanent names have now been given and the price reduced.
WILLITS (offered last year as No. 2). Half wheat, half rye by parentage, though resembling wheat in all respects. Nearly as early to mature as rye. Heads average over three inches long, eight breasts (or spikelets) to a side. Chaff white, beardless. Often four grains to a breast, always three, of medium size, amber color and apparently hard.
ROBERTS (offered last year as No. 3). Half wheat, half rye by parentage, though resembling wheat in all respects. Nearly as early as rye to ripen. Tall, yellow, stiff straw. Heads average three inches long, seven breasts to a side. Chaff brown, bearded. Three grains to a breast, small to medium size, dark amber color.
BAILEY (offered last year as No. 50). Pure wheat cross. Early. Heads average over three inches and somewhat club-shaped, seven breasts to a side; chaff white, beardless. Generally four grains to a breast, medium to small in size, hard, and of amber color.
STEWART (offered last year as No. 5I). Pure wheat cross. Late. Heads very long, averaging over four inches, nine breasts to a side; chaff brown, heavily bearded. From three to four grains to a breast, medium size, amber color. Stem tall and strong.
BEAL (offered last year as No. 53). Pure wheat cross. Medium to mature. Heads average nearly four inches. Breasts crowded-often ten to a side ; chaff very clear and white, heavily bearded. Four grains to a spikelet-sometimes five-fair size, amber color. Inclined to club-head.
JOHNSON (offered last year as No. 55). Pure wheat cross. Medium to ripen. Heads average nearly four inches. Eight breasts to a side ; chaff white heavily bearded; three to four grains to a breast, fair size, bright amber color, hard. Regular heads.

## DIRECTIONS FOR SOWING IN TRIAL QUANTITIES.

Plant a single grain in early autumn, in well prepared soil, one foet apart each way. It will produce from 25 to 35 stalks to each grain planted. To make sure of a good stand, it is well to mulch the ground about an inch thick with well-rotted manure ; this should not be done, however, before the ground is well frozen.

NOTICE.-None genuine unless purchased of us, as the entire product was sold to us by Mr. Carman.

| Price for each variety : |  |
| :---: | :---: |
| Per ounce | \$0 25 |
| Per $1 / 4 \mathrm{lb}$. | 75 |
| Per $1 / 2 \mathrm{lb}$. | 00 |
| Per i lb. | 150 |
| Per 5 lbs. | 500 |

# Miscellaneous Seeds and Seeds of ECONOMICAL PLANTS. 

## ALPILARIA. See Erodium cicutarium.

ASPERUTA ODORATA. (Waldmeister.) This perennial plant, growing about six inches high, bears a small, white and very fragrant flower; succeeds in almost any soil. In Germany it is thought much of as imparting a certain bouquet to Rhine wine when compounded with it, making a beverage commonly known as Maitrank. Per packet, 10 cents; per oz., 60 cents.
BEANS-Common English Horse Beans. Per lb., 15 cents; per 100 lbs., $\$ 7$.
Soja hispida. (Soja Bean.) Resembling a bean; the haulm is stiff and the pods are produced in clusters of from two to five, and contain each four smooth oval nankeen colored seeds. This plant is said to thrive well in hot and dry weather; very valuable for the south for either man or beast. Per lb., 20 cents; per $100 \mathrm{lbs} ., \$ 11$.
BROOM CORN-Iong-Brush Evergreen. Broom Corn succeeds in a good deep soil, fresh but not damp; it is very sensitive to cold. Per lb., 15 cents; per 100 lbs., $\$ 7$.
Improved Dwarf. Per lb., 15 cents ; per $100 \mathrm{lb} ., \$ 7$.
California Golden Long-Brush. Grows from twelve to fourteen feet high. Per lb., 15 cents; per 100 lbs., $\$ 7$.
BROOM, SCOTCR: (Genista scoparia.) The young growth of this shrub is chietly valuable as food for sheep and other animals in winter. It is also employed for the making of coarse brooms. Per oz., 10 cents; per lb., 50 cents.
BURNET-Common Field. Per lb., 25 cents; per 100 lbs., $\$ 12$.
CAPFR IRREP. (Capparis spinosa.) Per paper, 15 cents; per oz., 75 cents.
CATERPILIARS. A curious plant. Of interest only on account of its curious fruit, from which its name is derived. Much fun is caused by mixing them in salads. Per paper, 5 cents.
CHICORY-Iarge-Rooted. A perennial plant, remaining five or six years in the same soil, provided it is cut before flowering. It may be cut four or five times during the same season, and furnishes an excellent green fodder. Sow broadcast in autumn or spring, either alone or with any kind of Clover. Sown in drills, the roots become well developed. When they are dried, roasted and ground, they become the Chicory of commerce, and are used in adulterating coffee. Per oz., 10 cents; per lb., 60 cents.
COTTON-Sea Island. Per lb., 15 cents; per 100 lbs., $\$ 7$.
Tennessee Upland. 25 lbs. to the acre. Per lb., 15 cents; per 100 lbs ., $\$ 7$.
COW PEAS. Adapted to southern localities; also valuable in this latitude as a fodder plant, sheep being very fond of them when in flower; its chief value is as a green crop to plow under. $11 / 2 \mathrm{bush}-$ els to the acre. Per quart, 20 cents; per bushel, $\$ 3$ to $\$ 3.50$.
DHOURA-Guinea Corn. See Sorghum.
EREODIUM CICUTARIUM. A valuable forage plant, growing throughout the State of California and extending to British Columbia, New Mexico and Mexico, where it is called "Alfilaria." It belongs to the geranium family, and will grow two feet high. Makes an excellent fodder plant, either in the green state or cured as hay. Per oz., 15 cents; per lb., $\$ 1$.
ESPARSEPTPE. See Onobrychis sativa.
ESPARTO GRASS. (Stipa tenacissima.) This is the true Esparto Grass, extensively grown in Spain and other parts of the Mediterranean countries for making ropes, etc. Per oz., 60 cents.

FENUGREEK. An annual plant, and very fragrant The seed is of ten sought by hostlers to give a temporary fire and vigor to their horses. It is frequently given to oxen and pigs when fattening, causing them to drink and digest their food. Considered to be good for soiling when green. Per oz., 10 cents; per lb., 40 cents.
F'LAX SEED. Price variable.
FURZE. (Ulex Europaeus.) The sprigs of one year's growth of this shrub furnish an excellent green fodder in winter; grows well in sandy soils. Per oz., 10 cents; per lb., 60 cents.
GUINEA GRASS. See Sorghum.
GUIZOTIA OLFIFERA. An annual from Abyssinia, from the seed of which oil is extracted. Per oz., 10 cents; per lb., 40 cents.
HOP SEFD. Per packet, 10 cents; per oz., $\$ 1$.
INDIGO SEED. (Indigofera tinctoria.) Per oz., 15 cents ; per lb., $\$ 1.25$
IRIS PABUIARIA. A foliage plant, flourishing in the driest and most arid soil. The leaves, twelve to sixteen inches long and produced three or four times in one season, are eaten by cattle, either green or dried. The seeds should be sown in beds and the young plants set out ten inches apart each way, very early the following spring, where they are to remain. It is doubtful if it will prove hardy in the northern states, but it should certainly be tested in California and in our dry southwestern region. Per oz., 30 cents; per lb., $\$ 3$.
JAPAN CIOVER. See Lespedeza striata.
JUTE. An annual plant. In Bengal the fibers of this plant are used for making coarse sacks in which coffee and sugar are packed, and also for coarse wearing apparel. It is cultivated extensively in the East Indies, China and Japan, and is now freely sown in our southern states. It thrives in any good corn ground. Sow in drills about eight inches apart, four pounds to the acre. Requires no cultivation, as it will outstrip in growth all weeds. May be also sown broadcast, six to seven pounds per acre. Per oz., 10 cents; per lb., 60 cents.
KATFIR CORN. See Sorghum.
KIDNEY VETCH or Sand Clover. See Clover, page 49.
IENTIIS-Best Imported. Succeeds best in dry sandy soil. A leguminous annual, the seeds of which are valuable for pigeons and largely used for soups. Per lb., 20 cents; per 100 lbs ., $\$ 10$.
IUPINS-Blue. Used for the same purpose as the yellow variety. Per lb., 20 cents; per 100 lbs., $\$ 3$.
White. One of the best plants known for soiling. It may be sown from April to July, and plowed under when in flower. The seed when burned is excellent manure for orange and olive trees. Per lb., 20 cents; per 100 lbs., $\$ 9$.
Kellow. Less thrifty than the white variety, but still having an advantage over it in remaining green for a longer period. It succeeds well in the poorest soil, and many lands formerly poor have had their value greatly enhanced by plowing in this Lupin as a manure. Per lb., 20 cents; per 100 lbs., $\$ 8$.
IESPEDEZA STRIATA. (Japan Clover.) A per ennial, growing about twelve inches high, valuable only in southern localities, where it thrives in any soil and in the driest seasons; it makes a fair hay, and stock eat it readily when green. Per lb., 40 cents; per 100 lbs., $\$ 35$.
MADDER. (Rubia tinctoria.) A perennial plant, the roots of which, when dried and reduced to powder, furnish a red coloring matter. If cut the second year when in flower, it furnishes a very good green fodder. Per oz., 10 cents; per lb., 80 cents.

## MISCELLANEOUS SEEDS-CONTINUED.

MADIA SATIVA. An annual plant, producing good sheep pasturage; valuable in dry and warm soil. Per oz., 10 cents; per lb., 60 cents.
MIILO MAIZE. See Sorghum, Rural Branching
ONOBRYCHIS SATIVA. (Sainfoin, French; Esparsette, German.) A perennial leguminous plant, belonging to the same family as Clover and Lucerne; used in France as a forage plant. Requires a calcareous soil. 100 lbs . to the acre. Per lb., 15 cents; per 100 lbs., $\$ 8$.
OSAGE ORANGE. (Maclura aurantiaca.) For hedges. See Hedge Plants, page 45.
PEARI MILIET. (Penicillaria spicata.) A valuable fodder plant for the south; is enormously productive. Sow in drills eighteen inches apart, and eight to ten pounds to the acre. Per lb., 25 cents; per 100 lbs ., \$14.
PEAS-Canada Field. Valuable for northern climates, for cattle feeding. Per quart, 15 cents; per bushel, $\$ 1.50$.
POPPY-Opium. The seed furnishes about thirtyfive per cent. of an agreeable sweet oil, good for eating, painting and illuminating. May be sown in spring either broadcast or in drills, covering with but little earth. Also cultivated for opium. Per oz, 20 cents; per lb., $\$ 1$.
PYRETHRUM ROSEUM. The plant from which is made insect powder in Europe. Per oz., $\$ 1$.

(Urtica nivea.) -This is the variety now so extensively cultivated in the south for'its fibre. The seed should be germinated by sowing it on cotton, Hloating in a tub of lukewarm water, and transferring it to a bed, screened from the hot sun. When the plants are four inches high, transplant to a field in rows four feet apart each way; and when plants are three feethigh, turn them over and peg to the ground, after which cover them with the earth and they will start in every direction, completely covering the field in a short time. Per oz., 75 cents; per lb., $\$ 8$.
REANA LUXURIANS. (Teosinte.) A valuable fodder plant from Central America, resembling in growth Indian Corn. Adapted to our southern states. Per oz., 15 cents; per lb., $\$ 1.25 ; 100 \mathrm{lbs}$., $\$ 80$.
SORGHUM. (Dhoura or Guinea Corn.) WhiteSeeded. Per lb., 15 cents; per 100 lbs., $\$ 7$.
Early Amber Sugar Cane. Ripens where Indian Corn matures. Per lb., 15 cents; per 100 lbs ., $\$ 5$.
Early Orange Sugar Cane. Ripens about ten days after Early Amber. Per lb., 15 cents; per 100 lbs., $\$ 5$.
Lenk's Hybrid Sugar Cane. Per lb., 15 cents; per 100 lbs., $\$ 8$.
Halepense. (Johnson Grass.) One of the most valuable southern fodder plants, and only recently discovered to be perfectly hardy in New Jersey. It is a rapid growing perennial. On rich soils it may be cut three or four times in a season. The best results are obtained by sowing the seed in August and September at the rate of 25 to 35 lbs . to the acre. Per lb., 25 cents; per 100 lbs ., $\$ 12$.

SORGHUM-Yellow Branching. Is tall, nine to
twelve feet, stooling from the ground like the Rural Branching or Millo Maize, but not so much. It sends out shoots also from the joints. It possesses all the vigor and vitality of other Sorghums. It is non-saccharine; useful only for the large amount of forage, green feed or cured fodder that it furnishes, and for its grain. Earlier than the Rural Branching variety. Per lb., 20 cents ; per 100 lbs., $\$ 8$.
Rural Branching. (Mil lo Maize.) The merit of this non-saccharine Sorghum is, that when cut


JOHNSON GRASS. (Sorghum Halepense.) for feeding itstarts again from the remaining stumps with renewed strength and vigor; thrives in the hottest and driest localities. One of the most valuable forage plants for tropical climates. Per lb., 20 cents; per 100 lbs ., $\$ 10$.
Kaffir Branching Corn or Sorghum. Non-saccharine, but distinctly different in habit from all others of that class. The plant is low, stocky, perfectly erect. It does not stool from the root, but branches from the top joints. The whole stalk, as well as the blades, cures into excellent fodder, and in all stages of its growth is available for green feed. If cut down to the ground, two or more shoots spring from the root, and the growth is thus maintained until checked by frost. Per lb., 20 cents; per 100 lbs., $\$ 10$.
SAINFOIN. See Onobrychis.
SCURVY GRASS. (Cochlearia officinalis.) Used as Pepper Grass. Per oz., 20 cents.
SFRADELIA. A fine fodder, of good quality, admitting of one, and sometimes two cuttings in one season. It succeeds wellin a dry, sandy soil, and furnishes a good pasture for sheep. Per lb., 25 cents; per 100 lbs ., 812 .


## MISCELLANEOUS SEEDS-CONTINUED.

SNAILS. Used in the same as Caterpillars. Per paper, 10 cents.
SPURRY. (Spergula arvensis.) Small annual plant, succeeding best in sandy soil. It can be used in its green state or for hay. Butter made from the milk of cows fed on this is considered of a superior quality in Belgium and Holland. It serves a useful purpose, growing luxuriantly on indifferent land. Should be sown early in spring, 15 lbs . to the acre. Per lb., 20 cents; per 100 lbs ., $\$ 9$.


SUNFLOWER-Large Russian. Perlb., 12 cents; per $100 \mathrm{lbs} ., \$ 7$.

## TEOSINTE. See Reana luxurians.

TEASELS-Fuller's. The heads, furnished with sharp, barbed spikes, are used for combing cloth. Teasels require a good deep soil, and should be sown about April or May. In the south they may be sown in the fall. The young leaves are often used for feeding silk-worms, instead of the leaves of the mulberry. Per lb., 25 cts . ; per 100 lbs ., $\$ 14$.
TOBACCO SEED-Brazilian American. The finest Brazilian strain grown in this country. Makes excellent cigars and delightful aromatic pipe-smoking tobacco. Per oz., 25 cts.; per lb., $\$ 2$.
Burley Kentucky White. Now the most popular variety grown in the west. Our seed grown from originator's stock. Per oz., 25 cents; per lb., \$2.
Connecticut Seed-Leaf. The popular sort used for cigar wrappers. Per oz., 25 cents; per lb., \$2.
Florida. Light brown variety grown in the south, where it is considered valuable. Per oz., 25 cents; per lb., \$2.
Harby. A Turkish variety which stands heat and drought beyond all others, and may be topped to twenty-five leaves or more. Superior to Latakia, and possessing a very agreeable odor and flavor. Per oz., 25 cents, per lb., $\$ 2$.

TOBACCO SEED-Havana. Seed gathered for us from a celebrated plantation of the "Vuelto de Abajo." Per oz., 40 cents; per lb., $\$ 3.50$.
Ohio. White-leaf, very large. Per oz., 25 cents; per lb., \$2.
Oronoka, Yellow. A reliable old yellow variety, grown for more than fifty years, and improved with reference to the production of yellow stock. Per oz., 25 cents; per lb., $\$ 2$.
Oronoka, White-Stem. From the Yellow Oronoka, which it resembles. Yer oz., 25 cts.; per lb., $\$ 2$.
Pennsylvania Seed-Leaf. Newest and best strain of this standard va iety, of which more is sold and planted than of all others of the cigar kind combined. Per oz., 25 cents; per lb., $\$ 2$.
Persian Rose. Finer than the Muscatel, and may be relied upon to make the best cigar. Per oz., 25 cents; per lb., $\$ 2$.
Pryor, Yellow. Preferred by many for brights, and succeeds where other yellow sorts fail. The west is giving it preference. Per oz., 25 cents; per lb., $\$$. .
Pryor, Blue. The genuine James River favorite. Per oz., 25 cents; per lb., $\$ 2$.
Sterling. The newest and brightest of the yellow type, and the earliest to ripen. Per oz., 25 cents; per lb., \$2.
Tuckahoe. Preferable to most of the older varieties as possessing more body. Leaf long and extra fine-the perfection of a wrapper. Per oz., 25 cents; per lb., $\$ 2$.
Virginia, Hester. Has no superior for the yellow type, and makes fine cigar stock. It has size, shape, texture and color, and ripens early. Per oz., 25 cents; per lb., $\$ 2$.
Virginia, One-Sucker. Yellow. Per oz., 25 cents; per lb., $\$ 2$.
VETCHES-Spring. Sown broadcast like wheat or barley, and sometimes mixed with oats for soiling. Used in France and Canada as a substitute for peas. Also ground up into flour, after which it is mixed with wheat flour for making bread. A valuable plant. Per qt., 20 cents; per bus., $\$ 3.50$.
WILD RICE. (Zizania aquatica.) A native of our northern and western states. Valuable as a forage plant for swamps and inundated lands. Stock of all descriptions are fond of it when green, and also when cured for fodder. It is also valuable to the sportsman as a bait for wild fowl. The Indians of the lake region of the northwest, especially of Wisconsin, Minnesota, Dakota and North, as is well known, made great use of this Zizania as an article of food, gathering it by beating it off into their canoes, and curing it for winter food, the rice having been found to be of superior flavor. Directions for Sowing.-"Put the rice in coarse linen or cotton bags, and sink them in water for twenty-four hours. Sow in water which is from six inches to five feet deep, in soft mud bottom, and in places where there are but few weeds. It is useless sowing this seed except on a mud bottom, or on low marshy places, which are covered with water the year round. In running water, sow as much out of the current as possible." Per lb., 25 cents; per 100 lbs ., $\$ 1650$.
WORMS. Used the same as Snails and Caterpillars. Per packet, 10 cents.

## From the "London Garden."

Rural New-Yorker Potato.-In the spring of 1888 I received a potato from Messrs. Thorburn, of New York, for trial. It was called Rural New-Yorker, but as the season turned out unfavorable, I resolved to give it another trial before forming or expressing an opinion on it. This spring I planted the produce of one of last year's plants, and have just dug up the crop, and a finer lot of tubers I never saw, there being no really small ones, but all of good average size. Several are one pound in weight and of most excellent quality. It is a white potato, very solid, with shallow eyes and oval shape, just the thing for a main crop variety. I may add that the potatoes were planted between rows of young fruit trees, and in a quite open position the crop would doubtless have been heavier. The tubers were simply cut up to a fair seed size. The crop from one medium-sized potato, in two seasons, amounted to fully two bushels of fine sound tubers. -J. Groom.

# Horticultural Implements and Garden REQUISITES. 

Asparagus Knives-Best English
Atomizers-Goldman's. A convenient and useful sprinkler ..... 25
Bellows-Woodason's Powder. For Hellebore, Tobacco Dust, etc \$1, \$2 and 300
Bill and Brush Hooks-For heavy pruning with one hand ..... $\$ 1.50$ to 200
Canes-Bamboo, 7 to 10 feet long; useful for plant sticks $\$ 1.25$ per 100
Corn Knives-For cutting off corn-stalks35
Daisy or English Lawn Rakes $\$ 250$ to
Dibbles-Hard Wood, iron-pointed40
Fertilizers-Ground Bone. 5 lbs., 25 cts. ; 50 lbs., $\$ 1.25 ; 100$ lbs., $\$ 2$; per ton, $\$ 32$.Guano. Best Peruvian.2 lb. boxes, 25 cents; per 100 lbs., 84 ; per bag or ton, according to marketThorburn's Floralis or Concentrated Plant Food. The best Fertilizer for generaluse2 lb . boxes,25
Complete Manure, Potato Manure and Lawn Fertilizer. See special list, page 59 Sheep Manure, Pulverized. An excellent lawn fertilizer . . . 5 lb . packages, 30 cts ; 25 lb. packages, $\$ 1.25 ; 50 \mathrm{lb}$. package, $\$ 2 ; 100 \mathrm{lb}$. bag, $\$ 3$; per ton, $\$ 45$
Forks-Digging or Spading $\$ 100$ to ..... 150
Hay or Stable 75 to ..... 25
Ladies' Short-Handled 50 to ..... 00
Manure, Long and Short-Handled. ..... 100 to 150
Fruit Picker-Bevin's Patent ..... 400
Fumigator-Improved Exglish. For fumigating with Tobacco \$1 and
Garden Force Pumps-Indispensable in large gardens ..... 600
Garden Lines-Finest Braided, 100 feet ..... 75
Garden Reels-For above; of wrought iron ..... 50 and ..... 75
Garden Pencils-Indelible Black. per dozen, \$1
Grafting Wax-In $1 / 4,1 / 2$ and 1 lb . packages per lb., 40 cts
Grass Border Shears. $\$ 225$ to
Grass Edging Knives ..... 150 to275
Grass Hooks or Sickles-American or English ..... 35 to ..... 00
75
Hedge Shears-English, 8 to 12 inch blades ..... 200 to 300
Hoes - American Crescent, Handled ..... 50
Draw or Corn ..... 60 to ..... 5
Greb 50 to
Onion
Prong or Potato Hook.
75Scuffle, Dutch or Push25 to
Triangular. Used also as Tree Scrapers ..... 50 to
Hose Menders.-Useful article for repairing rubber hose\% 5508575
Hyacinth Glasses.-Various styles. (See Bulb Catalogue). $\$ 1.50$ to $\$ 2.50$ per dozen
Insecticides.-Fir Tree Orl. A reliable insecticide for in-door use
$1 / 2$ pt., 40 cts. ; pt., 75 cts.; qt., \$1.25 ; 1/2 gal., \$2.25 ; gal., \$4
Gishurst's Compound. A certain remedy for green fly, scale, mealy bug, etc. . lb. box,50
Hellebore ..... per lb., 35 cts
Woodason's Poultry-Lice Killer. per lb., 25 cts
Paris Green, Pure ..... per lb., 30 cts
Whale Oil Soap. For washing trees, etc.; very effective
.In boxes of $2 \mathrm{lbs} ., 30 \mathrm{cts}$; 5 lbs., 70 cts. $; 10 \mathrm{lbs} ., \$ 1 ; 20 \mathrm{lbs} ., \$ 1.75 ; 100 \mathrm{lb}$ keg., $\$ 6$Sulphur. For mildew on grapes, roses, etc. . . . . . . per lb., 10 ets. ; 10 lbs., 60 cts.Tobacco Dust. For cabbage worms, caterpillars, etc.
per lb., 10 cts. ; 25 lbs., $\$ 1$; 100 lbs., $\$ 3$Tobacco Soap. Highly recommended. . . . . . . . . . . . . . . . per $1 / 2$ lb. tin,25
Tobacco Stems In bales of about 250 lbs ., ..... 350
Knives-Asparagus, English. ..... 150
Budding, Best English ..... 75 to 150
Corn ..... 35
Grass Edging $\$ 1.50$ to 200
Pruning, Best English 60 to ..... 200



NEW MODEL LAWN MOWER.


EXCELSIOR ROLLER LAWN MOWER.

## LAWN MOWERS.

## THE NEW MODEL.

The manufacturer says: "The New Model combines every improvement that nearly a score of years of experience as Lawn Mower manufacturers can suggest or mechanical skill devise. For simplicity, durability and quality of work, it is unequalled, while for lightness of draft it excels by a large percentage any other Lawn Mower made. A most thorough trial is solicited." The latest and best Lawn Mower, and will give entire satisfaction

## Net Prices, No Discount.



## EXCELSIOR ROLLER LAWN MOWER.

The above out represents the Roller Mower, which has been greatly reduced in weight and draught, and is without doubt the lightest running Roller Mower made. The gears are perfectly covered, and the grass and dirt are entirely excluded. The Roller Mower does the most perfect work, and also a greater variety of work than other styles of Mowers. The Roller serves to roll down the imperfections in the lawn, such as ant-hills and small upheavals by frost.

## Net Prices, No Discount.



## NEW EXCELSIOR HORSE LAWN MOWER.

## Net Prices, No Discount.

This is a most admirable implement for mowing large grounds, and is the best of its class. 25 -inch cut, without Seat or Shafts
$\$ 4000$
35 -inch cut, with Seat and Shafts


NEW EXCELSIOR HORSE LAWN MOWER

## SYRINGES.



No. 1, \$2.25.
Ladies' Syringe, with One Spray Rose. Length of barrel, $12 \frac{1}{2}$ inches; diameter, $15-16$ inches.


No. 2, \$3.75.
Iadies' Syringe, with Jet and Two Spray Roses; the two roses when not in use are screwed on the sides of the barrel, as shown in cut. Length of barrel, 141/2 inches; diameter, $15-16$ inches.


No. 3, \$5.5C.
Best Plate Valve Syringe, large size, with One Stream and Two Spray Roses, with side pieces on barrel. Length of barrel, 18 inches; diameter, $11 / 2$ inches.


No. 4, \$6.00.
Best Conical Valve Syringe, large size, with One Stream and Two Spray Roses, which are placed, when not in use, in the handle of syringe. The handle is strongly mounted with a solid brass cap and ring. When the finest spray is used the water should be very clean. Length of barrel, 18 inches; diameter, $1 \frac{1}{2}$ inches.


No. 5, \$6.00.
Best Conical Valve Syringe, large size, with One Stream and Two Spray Roses. This syringe is in general use with horticulturists in the United States and Europe. With side pieces on barrel. Length of barrel, 18 inches; diameter, $11 / 2$ inches.


Best Conical Valve Syringe, large size, with One Spray Rose and GooseNeck Angle Joint, turning in all directions, for washing the under surface of the leaves of plants and flowers, cleansing them from insects, etc. Length of barrel, 18 inches; diameter, $11 / 2$ inches.



Rubber Sprinkier. \$1.


Woodason's Atomizer, \$2.

The Eclipse Combined Syringe and Eorce Pump.-This is an excellent combination, easily worked and very powerful, throwing a continuous stream for 50 feet with as little exertion as is required for the smallest syringe. By means of the hose attached, water, etc., may be drawn from a tank or stream, thus insuring a continuous flow. With the elbow joint attached, it is the most perfect apparafus for cleaning the under surface of leaves, etc. With 4 feet of hose, complete, $\$ 6$; fixed elbow joint, 75 cents. Large size syringe, $\$ 775$; fixed elbow joint, $\$ 1$.

Rubber Sprinkler, for florists' use and window gardening, $\$ 1$.
Woodason's Atomizer, for the application of all liquid insecticides, $\$ 2$.

## ROLLERS.

The style of these indispensable garden and lawn implements is sufficiently indicated by the cuts.


## GARDEN.

With weights to keep handle erect ; a convenient style.


Q With Whiffle, \$2 extra; with Sha t or Pole, same price.

## FERTILIZERS.

These Fertilizers are especially manufactured for us, and are reliable and efficient for the purposes specitied. Bone basis guaranteed.

Great care should be taken that all Fertilizers are well incorporated with the soil, so as not to come in contact with and destroy the vitality of the seed sown.

## THORBURN'S COMPLETE MANURE.

Guaranteed to contain ammonia, 3 to $31 / 2$ per cent. ; phosphoric acid, all soluble, 8 to 10 per cent. ; sulphate of potash, 7 to $\tau 1 / 2$ per cent.; sulphate of magnesia, soda, lime, sulphuric acid, etc.

Adapted for use on all crops, such as corn, tomatoes, potatoes, peas, beans and early vegetables, and is especially suited for grain crops and for seeding down grass.

Price-In 167 lb . bags, per ton, $\$ 35$; single bags of $167 \mathrm{lbs} ., \$ 3.50$; per bag of 75 lbs ., $\$ 2 ; 50 \mathrm{lbs}$., $\$ 1.50$;
25 lbs ., 81 ; 10 lbs ., 50 cents.

## THORBURN'S POTATO MANURE.

Guaranteed to contain ammonia, $41 / 2$ to 5 per cent.; phosphoric acid, all soluble, 7 to 9 per cent.; actual potash, 9 to 10 per cent.; sulphate of magnesia, soda, lime, sulphuric acid, etc.

This manure is for special use on the potato crop, and is also adapted for sweet potatoes, vines and fruit trees, and all leguminous plants.

Price-In 167 lb . bags, per ton, $\$ 43$; single bags of $167 \mathrm{lbs} ., \$ 4$; per bag of 75 lbs , $\$ 2.50 ; 50 \mathrm{lbs}$., $\$ 1.75$; 25 lbs., 81 ; 10 lbs., 50 cents.

## THORBURN'S LAWN FERTILIZER.

Guaranteed to contain ammonia, 5 to 6 per cent. ; phosphoric acid, all soluble, $51 / 2$ to 7 per cent. ; actual potash, $\tau 1 / 2$ to $81 / 2$ per cent.; lime, sulphate of magnesia, soda, sulphuric acid, etc.

Specially prepared for lawns and meadows as a top dressing, imparting to grass a rich green color and vigorous growth.

Price-In 167 !h. bags, per ton, $\$ 43$; single bags of $167 \mathrm{lbs} ., \$ 4$; per bag of $75 \mathrm{lbs} ., \$ 2.50 ; 50 \mathrm{lbs}$., $\$ 1.75$
25 lbs ., \$1 ; 10 lbs ., 50 cents.
R\% Quantity required per acre on soils not impoverished, about one-half ton.


nouglas spruce. (Abies Douglasii.)

## TREE AND SHRUB SEEDS.

## HOW TO GROW THEM.

In order to preserve seeds of Conifers and other Evergreen Trees it is best to keep them in perfectly dry sand until the time of sowing. For this latitude, the seeds should be sown thinly, as early in the spring as the ground can be worked, in beds of fine, sandy loam. Cover to the depth of about the thickness of the seed, and press the beds gently with the back of the spade to firm the earth around the seeds. Great care must be taken not to give too mach water, as the young plants damp off very easily. Water with a very fine rose, but never so that the ground becomes soggy. Some shade must be used to protect the young plants from the hot, drying sun and winds, and also to keep the birds from destroying them. Seeds of the rarer sorts may be sown in cold frames or in boxes; if in cold frames, the sashes should be shaded and the frames raised at the corners three or four inches, to allow the air to circulate freely. Keep the young plants well weeded, and allow them to remain from one to two years before transplanting.

The propagation of Deciduous Trees from seeds is less difficult than that of Evergreen species, a little attention only being required to sow at the proper season to insure success. Acorns, Hickory-Nuts, Chestnuts and Walnuts should be planted in autumn, or kept during the winter in sand or moss. They shrivel up by too long exposure to the air, and many of them lose their power of vegetating entirely. Those seeds with hard shells, like the Locust, Gymnocladus, etc., should be planted in autumn, or placed in boxes with sand and exposed to frost before planting, otherwise they may not vegetate till the second year after plant ing; but if these seeds are received too late in the spring to expose them to the action of the frost, they may be putinto a vessel of hot water for an hour or so before planting. American Elm, Silver Maple and a few other sorts ripen their seeds early in the summer, and, if gathered and planted soon after they fall from the tree, will make fine plants the same season. The seeds of other Deciduous Trees and Shrubs should be planted from the middle of April to the middle of May, in drills about two feet apart, and covered about half an inch in depth, according to size.

## EVERGREEN TREE SEEDS.

We do not sell Tree or Shrub seeds in quantities of less than an ounce of any one variety, except those that are quoted at over twenty-five cents per ounce; of these, twenty-five cent packets may be ordered.



## DECIDUOUS TREE AND SHRUB SEEDS.

[密 We do not sell Tree or Shrub Seeds in quantities of less than one ounce of any one variety, except those that are quoted at over twenty-five cents per ounce; of these, twenty-five cent packets may be ordered.



## deciduous tree and shrub seeds-Continued.

| Cytisus Laburnum. | aburnum | $\begin{aligned} & o z . \\ & 15 \end{aligned}$ | ${ }_{75}^{\mathrm{b}} .$ |
| :---: | :---: | :---: | :---: |
| Daphne Mezereum | Mezereum | 60 |  |
| Deutzia scabra | White Deutzia. Very handsome erect shrub | 40 | 0 |
| Dioscorea villosa | Wild Yam (pods) | 30 |  |
| Diospyros Lotus | . European Persimmon | 20 | 50 |
| " Kaki | Japan Persimmon. Of small size; produce excellent fruit | 20 | 200 |
| Mexicana | Mexican Persimmon | 25 | 200 |
| Virginiana | ers | 15 | 75 |
| Elæagnus angustifolia | le | 20 | 150 |
| Eucalyptus globulus | Tasmanian Blue Gum. Of exceedingly rapid growth . . . 2 other varieties, in limited quantities. . per paper, 10 cent | . 50 | 50 |
| Euonymus Europæa | . European Burning Bush |  | 15 |
| Fagus sylvatica. | . European Beech. Handsomest of the Beeches | 15 | 50 |
| Fraxinus alba Americana | . White American Ash |  | 50 |
| acuminata | Yellow |  | 75 |
| excelsior | European Ash |  | 5 |
| Ornus | . Flowering " |  | 75 |
| Oregona | Oregon |  | 100 |
| " quadrangu | lue Ash |  | 100 |
| " viridis | en American Ash. | 20 | 75 |
| Fremontia Californica. . . . . . . California Shrub. In winter and early spring is one mass of bright yellow flowers |  |  |  |
| Garrya elliptica | Elliptical-leaved Garrya |  |  |
| Gaultheria Shallon | Sala |  | 400 |
| Gaylussacia frondosa | Blue Dangleberry |  | 300 |
| Genista scoparia | . Scotch Broom |  | 40 |
| " tinctor | reen Broo |  | 150 |
| " juncea. | Rush-leaved Broom |  | 100 |
| Ginkgo biloba (See Salisburia) |  |  |  |
| Gleditschia Sinensis . . | . Chinese Thorn |  | 150 |
| " triacanthos | Honey Locust. Handsome tall tree with large spread | 10 | 50 |
| horrida | Thorn |  | 150 |
| " Japonic | apanese Honey-Locust | 30 | 300 |
| Gymnocladus Canadens | entucky Coffee Tree. | - 15 | 75 |
| Halesia tetraptera | . Silver Bell |  | 250 |
| Hamamelis Japonica. | . Japanese Witch-Hazel |  | 300 |
| " Virginica | itch-Hazel. Covered with curious yellow flower |  |  |
| Hedera Helix. | English or Hardy Ivy |  | 100 |
| Hesperalæ Englemannii |  |  |  |
| Hibiscus Syriacus fl. pl. | Double Rose of Sharon. |  | 150 |
| Idesia polycarpa | A new tree from Japan. Has very large leaves |  |  |
| Ilex aquifolium | . European Holly |  | 5 |
| " opaca. | . American " |  | 75 |
| Indigofera tinctoria | . Indigo Tree. |  | 125 |
| Itea Virginica | . Virginian Willow |  | 250 |
| Iva frutescens | . Marsh Elder | 20 |  |
| Juglans cinerea . . . . . . . . . Butternut . . . . . . . . . . per qt., 10 cts. ; per bus., $\$ 250$. |  |  |  |
|  |  |  |  |
| Sieboldi. | . From Japan |  |  |
| cordiformis |  |  |  |
| Kalmia angustifolia . . . . . . . American Laurel (pods) |  |  |  |
| latifolia | Mountain Laurel or Calico Bush | 100 | 1000 |
| Kcelreuteria paniculata | hinese Bladder |  | 100 |
| Larix Europæa. | European Larch |  | 100 |
| " leptolepis | . Money Pine of Japan. Hardy, rapid grower. Fine erect for |  |  |
| Laurus nobilis . | . Sweet Bay |  | 100 |
| Leiophyllum buxifolium | Sand Myrtle | 25 |  |
| Ligustrum Japonicu | . Japan Privet |  | 100 |
| " vulgare | . Common Privet |  | 100 |
| Liquidambar styraciflua. | Sweet Gum Tree. | 40 | 400 |
| Liriodendron tulipifera | . Tulip Tree. Fine tall pyramidal tree |  | 60 |
| Maclura aurantiaca . . . . . . . Osage Orange (see Hedge Plants.) |  |  |  |
| Magnolia acuminata | Cucumber Tree. |  |  |
| " glauca | . Sweet Bay |  | 300 |
| grandiflora. | . Large-flowering Magnolia |  | 150 |

## deciduous tree and shrub seeds-Continued.



## DECIDUOUS TREE AND SHRUB SEEDS-CONTINUED.



## GRAPE SEEDS. <br> NATURAL VARIETIES. <br> CULTIVATED VARIETIES.

| tis | ※stivalis |
| :---: | :---: |
|  | Californica. |
| " | candicans |
| '6 | cinerea. . |
| " | cordifolia |
| '6 | indivisa (berries) |
| '6 | Lincecumii |
| 6 | monticola |
| " | riparia |
|  | vulpina. |


| Per oz. | Per lb. |
| :---: | :---: |
| . \$0 25 | \$2 50 |
| 30 | 300 |
| 40 | 400 |
| 40 | 400 |
| 40 | 400 |
| 15 | 150 |
| 40 | 400 |
| 25 | 250 |
| 30 | 300 |
| 40 | 400 |

Black Pearl
Per oz. Per lb.
Clinton \$0 20 \$2 00 Concord. . . . . . . . . . . . . . . $\quad 20 \quad 150$ Cynthiana........................... 1500 Elvira 200 Herbemont $\quad 20150$ $\begin{array}{llllll}\text { Herbemont. . . . . . . . . . . . . . . } & 20 & 2 & 00 \\ \text { Ives' Seedling . . . . . . . . . . . . . . } & 15 & 1 & 00\end{array}$ $\begin{array}{llllll}\text { Ives' Seedling . . . . . . . . . . . . . . } & 15 & 1 & 00 \\ \text { Lenoir or Jacques . . . . . . . . . . . . } & 20 & 2 & 00\end{array}$

150
Norton's Virginia . . . . . . . . . . . . . . . $\quad 20$ 1 150

## BOOKS.

## All Books Sent Postpaid on Receipt of Price.

| American Cattle Doctor. By Geo. H. Dodd, <br> M. D. | My Vineyard at Lakeview . . . . . . . . . . $\$ 125$ <br> Peach Culture. By Hon. J. Alexander Fulton 150 |
| :---: | :---: |
| American Farm Book. By L. F. Allen . . . 250 | Practical Forestry. By And. S. Fuller .. 150 |
| American Gardener's Assistant. By Thos. | Practical Poultry Keeper. By Lewis Wright 200 |
| Bridgeman . . . . . . . . . . . . . . . . . . 250 | Rose, Ellwanger on the. . . . . . . . . . 150 |
| Asparagus Culture. . . . . . . . . . . . . . 50 | Silos and Ensilage. By Prof. Geo. Thurber . 50 |
| Bee-Keeping. By L. C. Root . . . . . . . 150 | Small Fruit Culturist. By And. S. Fuller. . 150 |
| Broom Corn and Brooms. . . . . . . . . . . 50 | Stewart's Sorghum and its Products. . . . . 150 |
| Cottage Residences. By A. J. Downing . . . 300 | Sugar Beet Culture. By A. H. Almy. . . . . 100 |
| Flint's Grasses and Forage Plants . . . . 200 | Sweet Potato Culture. By James Fitz. . . . 60 |
| Fruit Garden. By P. Barry . . . . . . . 200 | The Sugar Beet. By Lewis S. Ware . . . . 350 |
| Grape Culturist. By And. S. Fuller.. . . . . 150 | Tobacco Culture: Full Practical Details. . 25 |
| Hedges and Evergreens. By J. A. Warder. . 150 | Truck Farming at the South. By Dr. A. |
| Insects, How to Destroy . . . . . . . . 30 | Oemler : . . . . . . . . . . . . . . . . . . 150 |
| Mushroom Culture. By Wm. Earley . . . . . 40 | Wheat Culture. By D. S. Curtiss. . . . . . 50 |
| Mushroom Culture. By W. Robinson. . . . . 50 | Window Gardening. By Henry T. Williams . 150 |

# FLOWER SEEDS. 

## Practical Directions for Culture, Treatment, Etc.

HARDY ANNUALS (hA).-Sow in April or May, according to the latitute, in shallow boxes or pots


PhLOX DRUMMONDI. (See p. 86.) placed in a warm window, a hot-bed, or, if possible, in a greenhouse. A second sowing ought to be made from two to four weeks after for a succession, as well as to provide against failure the first time. For sowing seeds in, there is nothing better than shallow boxes from two to three inches deep, and of any convenient size. The most suitable soil in which to sow seeds of all the smaller kinds is a very fine, rich, sandy loam; if some fine charcoal can be mixed with it, it will be beneficial. The soil from old hot-beds is excellent, or sods from an old pasture piled up and allowed to rot for two or three years, and then mixed with a little old stable manure and sand. The selection of a proper soil in which to sow fine seeds is very important, as upon this depends the success or failure of them. After the seeds are up, care must be taken to give them plenty of air and moisture, and yet not too much water, or they will "damp off." When the young plants are well out of the seed leaf, they must be transplanted to new boxes. If pots two inches or more in diameter can be had, set out from three to a dozen or more of the joung seedlings around the edges of the pots, so that as soon as the ground is warm enough they may be easily turned out and planted singly, as by that time they will have made good roots. Where the pots cannot be had, boxes, tin cans, etc., may be substituted, or a cheap and effective plan is to take out the inside of a potato or turnip, leaving a shell half an inch thick; after filling these with the compost above referred to, set out the seedlings in them, and place the whole in boxes, filling in the spaces between the potatoes or turnips with soil. When the plants are ready to set in the open ground, it is an easy matter to transplant them, and as the decay of the turnips or potatoes affords nourishment to the young plants, a double purpose is served in using them.

A common mistake in sowing flower, as well as other seeds, is in covering too deep. As a general rule, cover only to the depth of the thickness of the seeds, or with medium-sized seeds like Balsams, Zinnias, etc., a half an inch or so is none too much. Such fine seeds as Portulacas need only to be pressed into the soil with a piece of board or the palm of the hand. Always press the earth down firmly after sowing all flower seeds, else there is danger of their drying up before the roots can get firm hold of the soil. Seeds of the hardier Annuals may be sown where they are to grow; but, as a rule, it is preferable to transplant, as the plants are generally stronger and stand the drought better. During very dry weather, and when the seedlings are first set out, they should be watered frequently. Provide some support for all such Annuals as require it, else the plants become weak and straggling, and do not make the show they otherwise would.

The weeds should be kept down and the ground loosened often, so that the plants will receive the full benefit of the rains and dews, which they will not if the ground is allowed to become hard and baked.

Seeds of Biennials and some Hardy Annuals may be sown in September in boxes and placed in cold frames. They will make strong plants by spring, and come into flower early. Do not put on the sashes until heavy rains and frosts render this necessary, and then always remove during the day, and whenever the temperature is above freezing in winter.

HARDY BIENNIALS ( $\mathbf{h B}$ ) and PERENNIALS ( $\mathbf{h P} \mathbf{P}$ ).-These require the same treatment as the Hardy Annuals. In addition to the above, both Hardy Biennials and Perennials may be sown in the open border in September; for if not sown until spring, the seeds of many Perennials require two years before they germinate. In this case it is a good plan, at the commencement of frost, to cover them lightly with straw, leaves, or any dry litter, in order to afford some protection from the extreme severity of the winter. As soon as the frost is out in the spring, remove the covering and loosen the surface around the plants, which, when large enough, may then be transplanted to the flower garden where they are to remain.

HALF-HARDY ANNUALS (hhA).-These may be sown in shallow boxes, pots, or a hot-bed, as directed for Hardy Annuals. They may be sown thus at any time after the middle of April, as the hot-bed will be sufficient protection; but it is best to cover the glass with a mat or straw at night until danger of frost is past. In the day give all the air possible by partly or wholly removing the lights. After the end of May sow in the border, like Hardy Annuals.

HALF-HARDY BIENNIALS (hhB) and HALF-HARDY PERENNIALS (hhP) require the same treatment. Though plants and their bloom are greatly forwarded by sowing the seeds early in boxes under cover, it may be stated that nearly all kinds of hardy and half-hardy flower seeds may be sown in the open border, in a warm and sunny spot, as soon as the soil has become dry and warm; so that those who have no glass frames or greenhouses need not be without Howers. They can have them, but it will be later.

TENDER ANNUALS, BIENNIALS and PERENNIALS.--The best method to obtain an early bloom of the Tender Annuals (tA) and to insure strength to the plants, is to sow the seeds in boxes or pots in March, placing them in a warm greenhouse, or plunging in a moderate hot-bed, carefully protecting them from the cold, shading from the mid-day sun, and watering with a fine rose. The seed should be sown in very light, sandy compost, and the pots well drained by placing broken pots or bits of sods in the bottom. The finer seeds must not be covered more than an eighth of an inch deep, and the soil pressed down closely over them. Water frequently, particularly if the house or hot-bed is very warm. As soon as the plants are out of the seed leaf, transplant into shallow boxes or small pots, and when they have acquired sufficient strength transplant into the flower beds; not, however, before the middle of May.

GREENHOUSE SEEDS (g).-Should be sown as directed for Tender Annuals, in pans, pots or shallow boxes, and be kept in the house, carefully watched, slightly watered occasionally, and sheltered from the hot sun till strong enough to transplant. Most varieties may be sown at any season of the year.

The smaller seeds of Greenhouse Plants are sometimes difficult to germinate, unless great care be taken in the mode of sowing. Hence the supposition is produced that the seed itself is not good, whereas the fault is not in the seed, but in the treatment. Fine seeds of this description should be sown in leaf-mould or peat, with some fine sand added to it; press firmly down in the seed pan or pot, and make perfectly level at the top, so that the mould may not afterward sink materially with watering. Sow the seed very thin, and cover very lightly with a little compost, or with silver sand. Success is more certain if a pane of glass is placed over the pan or box till the plants have appeared, when it should be removed. By this method the difficulty of starting fine seeds will be removed. As soon as the young plants have two leaves, they should be transplanted into similar compost in another pan or box; to do this, do not pull them out of the seed-pan, but break up the soil by running a stick or a trowel under it, when the plants can be taken out with good roots. After transplanting, they should be kept in a shady part of the greenhouse for a few days, until they are established in the new soil.

There are many minute plants from the finer seeds killed by drenching with water while very young. One way to avoid this is to give the water by dipping a clothes-brush in water, shaking off the greater part of the water from the brush, and then (holding the brush over the seed-pan) drawing the hand over the bristles several times, which will cause the water to be thrown on the young plants almost like dew. Some of the vaporizers and atomizers (as used for perfumes) now in use are admirably adapted for watering tender young plants. In the first stage of their existence, plants require moisture in a minute quantity, often repeated, and not in such large quantities as to saturate the soil in which they are growing.

Primula, Chinese.-The Chinese Primrose is deservedly one of our most popular winter-blooming plants. For winter use, it is easily raised from good seed, if sown at the right time and properly treated. Sow the seed in drills, in a light, rich soil in shallow boxes at any time from the middle of March till the middle of May; the earliest sown seed will naturally produce the earliest bloom. Cover the seed about an eighth of an inch, and press the soil on them with a board or the bottom of a pot. Water moderately, avoid forcing the seed, and keep the young plants away from drip. The boxes may be placed in the greenhouse, or out of doors in a frame. As soon as the plants are well out of the seed-leaf, transplant them singly into two or two-and-a-half inch pots, using a light, rich soil. The object now is to make good stocky plants, and they must therefore be re-potted as often as the pots become tolerably filled with roots, until they are in five or six inch pots, when they may be allowed to flower. Previous to this, any flower stalks that appear must be pinched out. In a suitable place the plants will do better out of doors than in the greenhouse during summer. They need a liberal supply of water. The plants will bloom continuously during the winter in either the greenhouse or a well-lighted sitting room, not too warm.

Cineraria. - Years ago the Cineraria was a popular plant among florists. Bedding plants crowded it aside, but it is now fast taking its proper place again among choice winter-blooming plants. It is, to be sure, a rather difficult plant to grow and bloom well if its requirements are not understood. The mistake generally made is in growing it in a warm house instead of a cool one. The seed should be started in the greenhouse. For winter blooming, sow the seed in April and May, in shallow boxes in fine soil; drop the seed in shallow drills, cover, and press the earth rather firmly with a piece of board or the bottom of a pot. Set the box where it will get the morning sun, but be free from drip; water moderately and carefully. The treatment of the seedlings should be similar to that given to the Chinese Primrose. As soon as the plants are out of the seed leaf, transplant singly into small pots in a rich soil with some vegetable mould in it. Re-pot as often as the pots become moderately filled with roots, or sufficiently often to prevent the roots from becoming pot-bound, and so avoid checking the growth. If specimen plants are wanted, the re potting should be continued till the plants are in pots from eight to ten inches in diameter. The last two pottings should be liberal ones, and drainage well provided for, as the plants will need copious waterings. When the flower stalks appear, manure water may

zinnia, mixed double. (See p. 92.). be used one or twice a week. Aphis and red spider are the chief enemies to be guarded against; and this is best done by frequent syringing or sprinklings overhead. The plants will do best during the summer out of doors in some place where they will not get too much sun, and be free from the drip of trees. In the fall the plants should be placed in a cool greenhouse, where the temperature can be kept low and the air moist. The plants should be placed on a table by themselves, and the pots always kept far enough apart to prevent the leaves in one pot from touching those in the next. In the winter it may be necessary to smoke the plants with tobacco occasionally to keep down the "green fly" or Aphis.

Calceolaria. - The herbaceous varieties of the Calceolaria are very beautiful and popular plants. They should be flowered in a cool greenhouse. The seeds are very small, and should be sown on the surface. Sow in shallow boxes, filled with a light, sandy soil that has been sifted. Sow moderately thick in rows on the surface, and cover very lightly with sifted sphagnum moss, cocoanut waste or very light soil. Press the soil firmly on the seed. The watering should be done carefully. An atomizer or brush may be used to advantage. To retain the moisture, the box may be covered with panes of glass, which must be removed, however, as soon as the plants make their appearance. The box should have plenty of light, but not much sun. As soon as the plants can be handled, transplant singly into pots two to two-and-a-half inches in diameter. The soil should be light and rich, and vegetable mould is an excellent addition. Re-pot as often as the pots are fairly filled with roots, and continue the re-potting if fine flowers are wanted, till the plants are in pots eight inches in diameter. If the pots become root-bound the plants are apt to run prematurely into flower. Water regularly and abundantly, to prevent drooping. As the pots increase in size, drainage must be supplied to carry off the surplus water. Place in a cool greenhouse in the winter, as directed for Cinerarias, and keep the pots apart to prevent leaves from touching. An occasional smoking with tobacco will keep down the green fly.

Geraniums.-The Scarlet or Horseshoe Geranium (or, more properly, Pelargonium), now so extensively used for bedding, may be easily grown from seed at any season of the year. If during the summer, better out of doors than anywhere else; but in a greenhouse or sitting room during the winter. Sow the seed in pots or shallow boxes, in any common soil; cover about an eighth of an inch, and press the soil on the seed. Transplant as soon as out of the seed leaf, in small pots, in a soil only moderately rich, or, if the seed were started out of doors, the plants may be put in the border. Seed sown indoors in the fall or early winter, and the plants grown in the greenhouse, will show flowers in June or July, while plants from those sown in March or later will not come into flower till August and September, and some even later. Much, however, depends upon the treatment, those receiving special care in pots blooming much sooner than those turned into a border or bed. The character of the flower will depend upon the quality of the seed, and while many will produce bright and pretty flowers, it is only occasionally that one will be found sufficiently good to save for a name.

## EXPLANATION OF THE FLOWER SEED CATALOGUE.

WE HAVE endeavored to make our flower-seed department as complete in detail and easy of reference as possible, and instead of the usual description, have adopted a system of classification in columns, using simple abbreviations to denote the varying characteristics of the varieties in regard to color, duration, time of flowering, hardiness, etc.

The first column gives the number, by which the different varieties may be ordered without writing out the whole name.

The second column gives the botanical name, in Roman characters, and the following additional information:

The asterisk ( ${ }^{*}$ ) designates ornamental-leaved plants.
The dash ( - ) designates the repetition of the name above it as applied to the variety to which the dash is prefixed.
in vars. designates in varieties, or mixed colors.
f. pl. designates flore pleno, or double-flowered.

The third column gives in figures the comparative time of flowering. As it is impossible, in our varied extent of climate, to state the exact month any plant may flower in, we have adopted the simple plan of classing the different varieties into early, intermediate, and late flowering sorts. Thus: 1 designates early.

| 2 | 6 | intermediate. |
| :--- | :--- | :--- |
| 3 | $6 \quad$ late-flowering plants. |  |

The fourth column gives the duration or character, and hardiness.

A represents Annual, lasting but one year.

| B | 6 | Biennial, lasting two years. |
| :--- | :--- | :--- |
| P | 6 | Perennial, lasting three or more years. |
| E | 6 | Evergreen. |
| S | 6 | Shrubs. <br> greenhouse plants-such as do best when <br> g |
| bu | 6 | bulbous plants-plants forming bulbs or <br> bulbous roots. |

.. designates in every case, repetition.
But as a large number of the Biennials and Perennials, if sown early, flower the first season, this distinguishing mark ( $\dagger$ ) is affixed to such.

The hardiness is denoted by the following abbreviations, but it should be understood that this is intended to apply to the


Calliopsis lanceolata. (See p. 74.) climate of the middle Atlantic States, and further north or south these designations apply only in a comparative way.
$h$ represents hardy-plants for open border.
hh 6 half-hardy-plants that require to be forwarded in pots or frames.
t " tender-requiring protection.
The fifth column gives the color in full, except as abbreviated below :
ap. for apetalous. . . . .
blk. " black . . . . . . .
br. ". car. carmine . .
$\begin{array}{ll}\text { br. } \\ \text { tri. } 6 \text { brown . . . . . . } & \text { cricolor. " } \\ \text { " crimson. . . . . . }\end{array}$
tri. " tricolor . . . . . sul. " sulphur . . . . pur. "purple . . . . .
The $\cdot$.
The sixth column give the comparative height of the plants in feet under ordinary cultivation; trai. signifies trailing; cr. stands for creeping.

The seventh column, the price per packet, at which the flower seeds will be delivered by mail at any post-office.

The eighth column gives brief observations respecting the various classes of plants catalogued, with special directions respecting their culture, where required. As these notes have been very carefully prepared, their suggestions are worthy of attention.

## FLOWER SEEDS.

## Flower Seeds mailed promptly, with postage prepaid, on receipt of the stated price. <br> See explanation of figures and signs on page 70.





CHRYSANTHEMUM MULTICAULE



cts.
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Flowering varieties
Handsome foliage.
Beautiful free flowering plants; fine for bedding.
Fine for cutting.
Showy, like the Calliopsis.
\{ Showy perennials, bearing light yellow flowers in fall.
(Centaurea Cyanus.) Showy.
Ornamental for single specimens or groups.
\} Swan River Daisy; for edgings. Should be started in hot-bed.

See Amethyst.
See Tassel Flower.
) Handsome, of brilliant colors;
$\}$ should be planted in sunny places. Fine for edgings.

Seeds are saved from the finest varieties; flowers are very fine, beautifully striped, blotch. ed and variegated; peculiar and pretty.

The Pot Marigolds are fine for back-grounds, being quite showy, especially "Meteor;" make excellent pot plants.
(Coreopsis.) Fine, showy plants; abundant in bloom and of bright colors. C. lanceolata is fine for cutting.

Free flowering, of pretty colors. Start in frame early.
Grand greenhouse plant.

One of the best known plants grown in the garden. The hardy perennials, if sown early in good soil, will bloom early the next season. The first two
on the list are very fine for edg ing and beds. Nos. 2535 and 2545 may be grown in pots.




DIANTHUS BARBATUS
("Sweet William.")


Single dahlia.


GAILLARDIA LORENZIANA.


GODETIA, LADY ALBEMARLE

NUMBER and NAME.

RTS All Flower Seeds delivered free by mail.

|  | Christmas Rose. |  |  |  |  | cts. | See Helleborus niger. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2690 | Chrysanthemum (Annual) - | 23 | hA | white | 11/2 | 5 |  |
| 2693 | -Double Yellow. |  |  | yellow | 112 | 5 | Showy, free bloomers. They |
| 2695 | -Double Mixed. |  |  | mixed |  | 5 | should be grown in gardens in |
| 2711 | tricolor album. |  |  | white |  | 5 | large beds, where they will |
| 2712 | -luteum |  |  | yellow |  | 5 | show their bright colors finely. |
| 2713 | -"Eclipse" |  |  | br.\& yl. | 1 | 10 | Perfectly hardy, and very de- |
| 2714 | -Mixed Single |  |  | mixed |  | 5 | sirable. C. multicaule is a val- |
| $2714 a$ | -Mixed Double |  |  |  |  | 10 | uable bedding plant. |
| 2715 | Burridgeanum . |  |  | w. \& r . |  | 5 |  |
| 2717 | multicaule (fine bedder) |  |  | yellow | $1 / 4$ | 5 |  |
| 2718 | inodorum, Double |  |  | white | 1 | 10 | For bouquets or edgings. |
| 2721 | frutescens (Paris Daisy) |  |  |  |  | 10 | C. frutescens is the Paris Daisy. |
| 2723 | uliginosum (fine for cutting) |  | thP |  |  | 25 | f or '"Marguerite." |
| 2730 | Chrysanthemum Indicum grandiflorum | 3 | hP | mixed | 3 | 10 | These are the celebrated sorts of the autumn shows that attract |
| 2731 | Japonicum |  |  |  |  | 10 | so much attention; bloom late |
| 2733 | -pompon. |  |  |  | 11/2 | 10 | in fall. |
| 2735 | Cineraria hybrida. | 1 | tgP |  | 2 | 25 |  |
| 2736 | -rubra. |  |  | lustr's |  | 25 | From the finest named flowers; |
| 2737 | -grandiflora |  |  | mixed |  | 25 | very beautiful and showy, the |
| 2738 | -kermesina. |  |  | crim |  | 25 | colors being distinct and bright. |
| 2743 | -nana |  |  | mixed | 1 | 25 | Very handsome cool green- |
| 2745 | -grandiflora alba |  |  | white |  | 25 | house plants, generally in |
| 2748 | -Azure Blue. |  |  | blue |  | 25 | bloom about the holidays. |
| 2750 | -Double | 2 |  | mixed | 2 | 75 |  |
| 2753 | maritima (Dusty Miller) |  | hhP | yellow | . | 5 | For ribbon gardening; have sil- |
| 2755 | -candidissima(Dusty Miller). |  |  |  |  | 5 | \} very foliage. |
| 2758 | Clarkia elegans, Double |  | ha | mixed | 1122 |  | ery pretty, free flowering, and |
| 2761 | -purpurea plena |  |  | purple |  | 5 | of easy cultivation. A bed of |
| 2763 | pulchella |  |  | rose | . . | 5 | these is very beautiful, espec- |
| 2765 | -alba |  |  | white |  | 5 | cially the double varieties. |
| 2766 | -marginata |  |  | bord. |  | 5 | They are useful as edging |
| 2768 | White Tom Thumb |  |  | white | $8 / 4$ | 5 | plants, or for vases and hang- |
| 2778 | Mixed |  |  | mixed |  | 5 | ing baskets. |
| 2779 | Clary, Purp | 12 |  | purple | 2 | 5 | \} (Salvia hominum.) Odd but pret- |
| 2779a | Red-Top |  |  |  |  | 5 | \} ty flowers. |
| 2782 | Cleome arborea | 2 | gP | white | 6 | 10 | Curious; very ornamental, in |
| 2783 | sesquiorgyalis |  | gA | purple |  | 10 | \} Castor Oil Bean style. |
| 2785 | Clianthus |  | gS | scarlet | 3 | 10 | \} Greenhouse plants, bearing |
| 2790 | puniceus |  |  | crim. | 6 | 10 | showy, pea-shaped flowers. |
| 92 | Clintonia (Downingia) pulchella | 2 | hA | tri. | 1/2 | 10 | Very pretty for edging. |
| 2795 | Cockscomb, Pres. Thiers |  |  | crim. | $3 / 4$ | 10 | (Celosia.) If grown in good rich |
| $\stackrel{2797}{2797}$ | Empress Dwarf Crimson |  |  |  |  | 10 | soil, the heads full, bright colored and very |
| 2799 | Queen of Dwarfs |  |  | rose | 1/2 | 10 | pretty. Can be preserved for |
| 2800 2812 | Glasgow Prize |  |  | crim. |  | 10 | winter bouquets by cutting off |
| 2812 | Japan Scarlet Mixed | 3 |  | scarlet | 3 | 5 | the heads before they are ripe, |
| 2823 |  |  |  | mixed |  |  | and drying in the house. |
| 2833 | * Coleus (Fine hybrids) |  | gP |  | 2 | 25 | Splendid bedding plants. |
| 2835 | Collinsia Bartsiæfolia |  | ha | purple | 1 |  |  |
| 2838 | bicolor | 12 |  | p. \& w. | 11/2 | 5 |  |
| 2839 | -alba . |  |  | white |  | 5 | Free Howering Annuals. If sown |
| 2840 | candidissima | 2 |  |  | 1 | 5 | in autumn, will stand the win- |
| 2843 2845 | grandiflora |  |  | p. \& w. |  | 5 | ter, and flower early in spring. |
| ${ }_{2845}^{2845}$ | multicolor |  |  | w. \& ro. |  | 5 | All the species are good and of |
| $\begin{aligned} & 2847 \\ & 2850 \end{aligned}$ | verna. . . |  |  |  | $1 /$ | 5 | fine color. |
| 2852 | Mixed |  | $\cdots$ | bl. \& $p$. mixed | $1 / 9$ | 5 |  |
| 2854 | Collomia coccinea |  |  |  |  |  |  |
| 2856 | Collomia coccinea |  |  | s. \& y. yellow |  | 5 | Fine for bees; also good for pot culture, and pretty. |
| 2858 | Columbine, Common Double |  | hP |  |  | 5 |  |
| 2860 | White........ |  |  | white |  | $\stackrel{0}{5}$ | See Aquilegia. |



NUMBER and NAME.

All Flower Seeds delivered free by mail.

| 2972 | Dracocephalum Moldavicum . | 3 | thP | blue | 2 | ${ }^{\mathrm{cts}}{ }_{5}$ | Ornamental. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Echeveria- |  |  |  |  |  | \| Interesting greenhouse succu- |
| 29:2a 2974 |  | 2 | gP | yellow | 1/4 | ${ }_{25}^{25}$ | \} lents, which are largely used <br> for carpet bedding. |
| 2978 | Epacris hybrida superba | 12 | gS | mixed | div. | 50 | Free blooming, like a Heath. |
| 2980 | Erica (Heath), Finest Mixed. | 23 |  |  | 2 | 25 | Charming evergreen shrub. |
| 2983 | Erinus alpinus. | 2 | hP | blue | $1 / 4$ | 10 | Beautiful for baskets. |
| 2986 2988 | Erysimum Arkansanum Peroffskianum | 12 | h. | yellow orange | 11/2 | $\begin{aligned} & 5 \\ & 5 \end{aligned}$ | Showy and free flowering, and of bright coiors. |
| 2990 | Eschscholtzia Californica | 13 |  | yellow | 1 | 5 | Very free bloomers for borders |
| 2990a | -alba |  |  | white | . | 5 | or bedding. The last is good |
| 2992 | crocea |  |  | orange |  | 5 | for edging, and the double sorts |
| 2995 | -plena |  |  |  |  | 5 | are very showy. Their bright |
| 2998 | tenuifolia |  |  | yellow |  | 5 | flowers are desirable in every |
| 3000 | Mandarin |  |  | o. r.cr. |  | 5 | garden, and are also fine grown |
| 3001 | Mixed |  |  | mixed |  | 5 | in pots. |
| 3003 | Eucharidium grandiflorum | 12 |  | rose |  | 5 | Free flowering and pretty. |
| 3005 | Eucnide Bartonioides |  | tA | yellow | 2 | 10 | Fine for rockeries or for pots. |
| 3010 | Eupatorium Fraseri | 3 | hP | white |  | 5 | Fine for winter bouquets. |
| 3014 | * Euphorbia marginata |  | h A | W. \& | . | 5 | Very pretty leaves; showy. |
| 3020 | Eutoca multiflora |  | hB | pink | 1 |  |  |
| $\begin{aligned} & 3022 \\ & 3026 \end{aligned}$ | Viscida $\underset{\text { Wrangeliana . }}{ }$ |  | hA | blue |  | 5 | plants for bedding; free bloom |
| 3030 | Fenzlia dianthiflora | 12 |  | rose | 1/4 | 25 | Pretty for ribbon gardening. |
|  | $\boldsymbol{F}$ everfew |  |  |  |  |  | ee Matricaria |
|  | Flax |  |  |  |  |  | See Linum. |
| 3046 | Forget-me-not- |  |  |  |  |  |  |
| 3048 | Myosotis alpestris. <br> -alba. |  | †hhP | blue white | trai. |  |  |
| 3049 | -elegantissima |  |  | mixed |  | 10 | All are beautiful. The Myosotis |
| $3049 a$ | -Victoria (fine for pots) |  |  | blue |  | 25 | palustris is the true "Forget- |
| 3050 | Azorica. | . |  | d. b. |  | 10 | me-not" of Europe. All the |
| 3054 3056 | - coelestina |  |  | 1. b. blue |  | 25 10 | species are favorites, being early flowering. |
| 3058 | palustris . |  | +hP |  |  |  |  |
| 3062 | sylvatica |  |  | blue | 1 | $\begin{aligned} & 10 \\ & 10 \end{aligned}$ |  |
| 3065 | Foxglove (Digitalis), White | 2 |  | white |  |  |  |
| 3070 | Large-flowered | 12 |  | 1. y. |  |  |  |
| 3072 | Rose. |  |  | rose |  | 5 | The Foxgloves are showy for |
| 3075 | Purple. . . ${ }^{\text {a }}$. |  |  | purple |  | 5 | back-grounds and borders, and |
| 3078 3080 | Gloxinia-like, White | 23 | $\cdots$ | white | 3 | 5 | are beautiful when planted |
| 3082 | -Mixed |  |  | rose mixed | $\cdots$ | 5 | among shrubs. |
| 3087 | Mixed | i ${ }^{\text {a }}$ |  |  | div. | 5 |  |
| 3089 | Four O'Clock, Hybrid. | 2 | tA |  | 2 |  | (Mirabilis.) Handsome, free |
| 3090 3091 | longiflora alba. |  |  | white |  | 5 | flowering, sweet-scented; blos- |
| $3091$ $3091 a$ | Variegated-leaved Dwarf White . | 23 |  | mixed |  | 5 | soms variegated, striped and |
|  | Dwar White |  |  | white | 1 |  | various colors. |
| 3092 | Fragaria Indica | 12 | hP | yellow | trai. | 25 | Beautiful scarlet fruit. |
| 3093 | Freesia refracta alba | 3 | gB | white | 2 | 10 | Very sweet flowers. |
| 3095 | Fuchsia, single, in var. | 13 | gS | mixed | div. | 50 | $\left\{\begin{array}{l}\text { "Ladies' } \\ \text { known greenhouse plant. }\end{array}\right.$ Well |



- MYOSOTIS ALPESTRIS.
(Alpine "Forget-me-not.")



MIRABILIS JALAPA.

african marigoln, "el dorado."

cts.


All Flower Seeds delivered free by mail.




AT All Flower Seeds delivered free by mail.

Lychnis Chalcedonica
-alba. . . . .

- ulged .
Haageana hybrida.

Madia elegans.
Malope grandiflora -alba.
-Mixed

| $:$ |  |
| :--- | :--- |
| $:$ |  |
| $\vdots$ |  |
|  |  |
|  |  |
|  |  |

Malva miniata (Sphoeralcea Munroana)
Marigold, African. - Mixed —"El Dorado" -Nugget of Gold Dwarf Striped Gold-Striped French -Mixed Ranunculus
Martynia Craniolaria proboscidea lutea formosa

## MLarvel of Peru



See Four O'Clock, page 79.
Feverfew. Pretty and neat; small double flowers.
Sweet Scented.
Ornamental; like the Lotus.
Beautiful dwarf edging plants, flowering profusely in dry, sunny situations. Curious and pretty.

The well known "Frenchman's Darling." Highly scented and very desirable,flowering freely. If wanted in winter, seeds should be sown in July. No. 3583 is fine for pot growing.

See Sensitive Plant.
Monkey Flower. Very showy, musk-scented, and free flower. ing. The hardy kinds are well suited for borders. Any common soil suits.

## See Aconitum.

See Scabiosa.
Abyssinian Banana; splendid tropical plant.
Musk-scented Mimulus.
See Forget-Me-Not, page 79.
(Tropcoolum.) Beautiful bedding plants. Planted in poor soil they flower profusely, and for a long time. The colors of the flowers cannot be excelled. The dwarf varieties should be planted so that they will contrast either with white or blue flowers. The foliage is also beautiful, being generally dark green.

NUMBER and NAME.
All Flower Seeds celivered free by mail.

General Observations.

| $\begin{aligned} & 3677 \\ & 3678 \end{aligned}$ | Nemesia compacta alba . . . . . | 23 | tA | white rose\&b. | 11/2 | $\begin{array}{r} \text { cts. } \\ 10 \\ 10 \end{array}$ | $\left\{\begin{array}{l}\text { Very pretty and neat flowering } \\ \text { plants for edges. }\end{array}\right.$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3650 | Nemophila atomaria | 13 | h A | w. \&pu. | 1 | 5 |  |
| 3682 | -oculata . . . . | . . | . . | b. \& W. |  | 5 |  |
| 3684 | discoidalis |  | -. | purple |  | 5 | ty annuals of easy growth, and |
| 3686 | insignis. | - | - | blue |  | 5 | deserves extensivecultivation; |
| 3690 | -alba. | . |  | white |  | 5 | are good in pots and edgings, |
| 3694 3698 | maculata . | $\cdots$ |  | bord. |  | 5 | in rockeries or in the garden. |
| 3700 | Mixed. | . |  | mixed | div. | 5 |  |
| 3701 | Nertera depressa | 23 | gP | white | cr. | 25 | Plant bearing coral berries. |
| 3702 | Nicotiana affinis (fragrant). | . | hha |  | 3 | 5 | $\left\{\begin{array}{l} \text { Species of tobacco; deliciously } \\ \text { fragrant flowers. } \end{array}\right.$ |
| $\begin{aligned} & 3703 \\ & 3706 \end{aligned}$ | Nierembergia gracilis frutescens. | $\cdots$ | gP | W. \& li. | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{aligned} & 10 \\ & 10 \end{aligned}$ | (Handsome flowers; fine for hanging baskets or edges. |
|  | Nigella |  |  |  |  |  | See Love-in-a-Mist. |
| 3707 | Nolana atriplicifolia. | 2 | h. | b.w.\&y. | 1/2 | 5 |  |
| 3710 | -alba . . . . . . . . . . | . . | . | white | . | 5 | Are very showy when in flower, |
| 3713 | lanceolata |  |  | b. \& W. |  | 5 | and should be planted in the |
| 3716 | paradoxa violacea. |  | . | b. \& V. | 1. | 5 | border; fine trailing plants. |
| 3718 | prostrata | - |  | blue | trai. | 5 |  |
| 3720 | Nycterinia selaginoides. . | 23 | hhP | pink | 8/4 | 5 |  |
| 3721 | capensis. |  |  | w. b. | , | 5 | $\}$ Pretty dwarf plants. |
| 3722 | Obeliscaria pulcherrima | 2 | thP | r. \& y . | 3 | 5 | Showy beilding plants. |
|  | Enothera |  |  |  |  |  | See Evening Primrose. |
| $\begin{aligned} & 3727 \\ & 3730 \end{aligned}$ | Orobus lathyroides niger | 23 | hP | blue purple | $\begin{array}{r} 11 / 2 \\ 3 \end{array}$ | $\begin{aligned} & 5 \\ & 5 \end{aligned}$ | ) These deserve a place in gardens; fine pea blossoms. |
| 3733 | Oxalis Valdiviana | 2 | tP | yellow | 1/2 | 10 | Charming little plants. |
| 3737 | Oxyura chrysanthemoides. | 23 | ha |  | trai. | 5 | Showy composite. |
| $3740$ <br> 3744 | Pæonia officinalis Sinensis | 2 | hP | red <br> blush | 11/2 | 5 | ) Beautiful hardy plants, with large, handsome flowers. |
|  | Sinensis |  |  |  |  | 10 | ) large, handsome flowers. |
| 3746 | Palafoxia Hookeriana. . | 3 | hA |  |  | 5 | Very good Everlastin |
| 3750 | Palava flexuosa | 23 | $\mathrm{hh} A$ | pk. \& d. |  | 5 | Pretty. |
| 3752 | Pansy, Black . . . | 13 | hA | black | 1/2 | 10 |  |
| 3753 | Lord Beaconsfield. | . . |  | violet |  | 10 |  |
| 3754 | Quadricolor | . . | . . | 4-color |  | 10 |  |
| 3755 | Striped. | . |  | strip. |  | 10 |  |
| 3758 | Emperor William . | . | . | blue |  | 10 |  |
| 3759 | Fawn Color | . . |  | fawn |  | 10 | (Viola tricolor.) All the varieties |
| 3760 | Light Blue : . | . | . | 1. bl. |  | 10 | are saved from fine, choice |
| 3762 | Violet-margined | $\therefore$. |  | mar. |  | 10 | flowering plants. They cannot |
| 3763 3765 | Gold-margined (Odier) | $\cdots$ | $\cdots$ |  |  | 10 | be surpassed in color or bloom- |
| 3765 | Five-blotched (Odier). | . . |  | spot. |  | 25 | ing qualities. They should be |
| 3766 | Bugnot's Superb strain | . | $\ldots$ |  |  | 50 | carefully cultivated, and will |
| 3767 | Trimardeau Giant. | . | . |  | . | 25 | richly pay for good treatment |
| 3768 | Black Blue . | . |  | bk.\&bl. |  | 10 | in their large flowers and foli- |
| 3769 3770 | Bronze . | . | . | bronze | . | 10 | age. The seeds should be sown |
| 3770 3773 | White | . |  | white |  | 10 | early in autumn, or very early |
| 3773 3777 | Azure Blue. | . |  | blue |  | 10 | in spring, and preferably in a |
| 3777 3781 | Pure Yellow © Candissima, "Snow Queen " | . | - | yellow |  | 10 | frame. |
| 3781 3786 | Candidissima, "Snow Queen" | - . | . . | white |  | 10 |  |
| 3787 | - alba marginata. | - |  | dk.pur |  | 10 |  |
| 3788 | Mixed . . . |  |  | mixed |  | 10 |  |
| 3789 | -Largest English. | . |  |  |  | 25 |  |
|  | Paris Daisy |  |  |  |  |  | See Chrysanthemum frutescens. |
| 3790 | Pelargonium, Fancy . | 23 | $g \mathrm{P}$ |  | 2 | 25 | Beautiful greenhouse plants. |
| $\begin{aligned} & 3804 \\ & 3810 \end{aligned}$ | Pentstemon Clevelandii Palmeri | $\cdots$ | hP | crim. |  | 10 | Among the most beautiful of our herbaceous perennials, and should be orown extensivels, |
| 3812 | Coboea. . |  |  | W. \& ro. |  | 10 | should be grown extensively, |
| 3820 | spectabilis. |  |  |  | 4 | 10 | ering; fine for bedding. They |
| 3824 | Mixed. | - |  | mixed | var. | 10 | do best in a mixture of loam and leaf mould. |


| NUMBER and NAME. |  | General Observations. |
| :---: | :---: | :---: |


| $\begin{aligned} & 3830 \\ & 3837 \end{aligned}$ | *Perilla Nankin *laciniatus. | 2 | hha | purple | $11 / 2$. | $\begin{array}{r} \hline \text { cts. } \\ 5 \\ 5 \end{array}$ | Ornamental-leaved; for ribbon gardening and beds. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3840 3842 | Persicaria, Red White | 3 | hP | red white |  | $\begin{aligned} & 5 \\ & 5 \end{aligned}$ | \} Showy for back grounds. |
| 3850 | Petunia, White | 3 | thhP |  | 2 | 5 |  |
| 3853 | Purple . . . |  |  | purple |  | 5 |  |
| 3855 | German Dark Purple |  |  |  | 11/2 | 25 | These are very ornamental plants |
| 3857 | Countess of Ellesmere |  |  | pr.\&w. |  | 10 | producing freely fragrant and |
| 3858 | unicaulis (distinct) |  |  | purple |  | 10 | beautiful flowers, and continu- |
| 3860 | German Crimson. |  | $\cdots$ | crim. |  | 25 | ing a long time in bloom. They |
| 3861 | Emperor (large flowers) |  |  | mixed |  | 25 | do well in the garden, house or |
| 3863 | plena (finest double) |  |  |  |  | 50 | conservatory, and will thrive |
| 3864 | Double Lilliput. . |  | . . |  | 1 | 50 | in almost any sort of soil. The |
| 3866 | Finest Single Mixed |  |  |  | 11/2 | 25 | newer varieties are of brilliant |
| 3868 | Mixed Single |  | $\cdots$ |  |  | 5 | colors and fine form. |
| 3870 | New Doubled Fringed |  | . . |  |  | 75 |  |
| 3871 | "Inimitable" nana compacta |  |  |  | $8 / 4$ | 10 |  |
| 3871a | venosa (veined). |  | . |  | 11/2 | 10 | Charming. |
| 3872 | Phacelia congesta | 2 | hP | pur. bl. |  | 5 | Fine for bees. |
| 3873 | Phlox Drummondii alba | 23 | hA | white | 1 | 5 |  |
| 3875 | -atropurpurea striata |  |  | strip. |  | 5 |  |
| 3880 | -Black Warrior | . |  | d. red |  | 5 |  |
| 3888 | -variabilis atropurpurea |  |  | purple |  | 5 |  |
| 3893 3894 | -Leopoldi. . . . |  |  | w. cr. |  | 5 |  |
| 3894 3900 | - iimbriata rosea alba striata. |  |  | ro. \& w. |  | 5 |  |
| 3900 3903 | -Radowitzii . . |  |  | white |  | 5 |  |
| 3906 | -Hortensiæflora |  |  | rose |  | 10 | This is a very elegant genus of |
| 3908 | -Clevelandii |  |  | wh.esc. |  | 10 | flowering plants, being highly |
| 3916 | -coccinea . |  |  | scarlet |  | 5 | colored, especially P. Drum- |
| 3917 | -cuspidata (Star of Quedlin- |  |  | mixed |  | 10 | mondii, an annual, the varieties of which are of the most beau- |
| 3919 | -Dwarf Blood Red |  |  | d. red |  | 10 | tiful colors. A bed of these |
| 3921 | -Dwarf Crimson Bouquet |  |  | crim. |  | 10 | will be highly prized for good |
| 3923 | -Dwarf White Snowball |  | $\cdots$ | white | 1/2 | 25 | habit, richness of color, and |
| 3925 | -Dwarf Fireball. |  |  |  |  | 25 | duration and profusion of |
| 3926 | -Dwarf Fancy Mixed |  |  | mixed |  | 25 | bloom. All grow well in pots |
| 3927 | -Mixed. |  |  |  | 1 | 5 | or as trailers. By making two |
| 3930 | -grandifiora lilacina |  |  | lilac |  | 10 | or more sowings they will flow- |
| 3931 | --Chamois Rose | . | $\cdots$ | rose |  | 10 | er till frost. Should be grown |
| 3932 | - -Eclipse (blue-vein |  |  | blue |  | 10 | in rich, loamy soil, and espec- |
| 3935 | --coccinea |  |  | scarlet |  | 10 | ially fine effects may be had in |
| 3936 $3936 a$ | - -alba. | . | $\cdots$ | white |  | 10 | planting masses of contrasting |
| ${ }_{3936}{ }^{39}$ | - - - Is sabealina. |  |  | rose |  | 10 |  |
| 3937 | - -splendens. |  |  | yellow <br> sc.\& w. |  | $\begin{aligned} & 10 \\ & 10 \end{aligned}$ |  |
| 3938 | - -Half Dwarf. . |  |  | mixed |  | 10 |  |
| 3939 | - -stellata splendens |  | $\cdots$ | crim. |  | 10 |  |
| 3940 | --Mixed, large-flowered |  |  | mixed |  | 10 |  |
| 3942 | -Double White |  |  | white |  | 25 |  |
| 3943 | -Double Red |  |  | red | $3 / 4$ | 25 |  |
| 3944 | hybrida superba (perennial) |  | $\dot{\mathrm{h} P}$ | mixed | ${ }_{3}^{4}$ | 10 |  |
| 3947 | Picotee, White Ground |  | hhP | w.\& sp. | 2 | 50 |  |
| 3949 | Yellow Ground |  |  | y. \& sp. |  | 50 | and beautiful, and finely scent- |
| 3951 3957 | Slate Ground |  |  | slate mixed |  | 50 10 | ed; few flowers are more at- |
| 3960 | -Extra Fine |  |  |  |  | 50 | tractive. |
|  | Pink- |  |  |  |  |  |  |
| 3963 | Dianthus Chinensis, Double Mixed . . . . . . |  | thB |  | 1 |  |  |
| 3965 | - -Double White |  |  | white |  | 5 | (Dianthus.) Beautiful and orna- |
| 3967 | dentosus hybridus |  |  | lilac |  | 10 | mental genus; for beauty and |
| 3969 | Heddewigi, Single Mixed | . |  | mixed |  | 5 | sweetness contain some of the |
| 3971 | -Double Mixed. . . . |  |  |  |  | 10 | most prized flowers we possess. |
| ${ }^{3973}$ | -diadematus, Double Mixed |  |  |  |  | 10 | The leaves of the hardy peren- |
| ${ }_{3975}$ | -laciniatus, Single Mixed | . |  |  |  | 5 | nials are green all winter. |
| 3977 | - -Double Mixed |  |  |  |  | 10 | Many can be grown in pots and |
| ${ }_{3981} 3979$ | imperialis, Double Mixed | . |  |  |  | 5 | kept in the house. No garden |
| 3981 3983 | -Double Dark Red arf Dous, Dwarf |  |  | red |  | 5 | should be without some of the varieties of the Dianthus fam- |
|  | White . . . . . . . . |  |  |  |  |  | varieties of the Dianthus fam- |
| 3986 | -Double Mixed Dwarf . |  |  | mixed |  | 5 | grance cannot be surpassed. |
| 3988 | Plumarius, "Pheasant Eye," |  |  |  |  |  |  |
| 3995 | -Sringed $\quad$-double Grass Pink |  |  |  | 1 | ${ }_{10}^{5}$ |  |

## NUMBER and NAME.

(4) All Flower Seeds delivered free by mail.

| 4014 4016 | Pittosporum undulatum . Platystemon Californicus | $\begin{array}{ll}1 & 2 \\ 2 & 3\end{array}$ | gS hA | w. \& y. | 3 1 | cts. 10 5 | \{ Well known greenhouse shrub. Flowers scented. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| $\begin{aligned} & 4018 \\ & 4019 \end{aligned}$ | Platycodon grandiflorum -album | 2 | hB | blue white | 2 | 10 10 | $\} \begin{aligned} & \text { Large Chinese Bell-Flower; very } \\ & \text { fine-flowering plants. }\end{aligned}$ |
| $\begin{aligned} & 4022 \\ & 4025 \end{aligned}$ | Podolepsis chrysantha gracilis |  | hh A | yellow <br> red | $1 / 2$ | 5 | \} Curious and pretty. |
|  | Polemonium |  |  |  |  |  | See Jacob's Ladder. |
| $\begin{aligned} & 4030 \\ & 4033 \end{aligned}$ | Polyanthus Finest | $\begin{array}{ll} 1 & 3 \\ & 1 \end{array}$ | thP | mixed |  | 10 25 | (Primula.) Fine varieties. From named varieties. |
|  | Poppy |  |  |  |  |  |  |
| $\begin{aligned} & 4035 \\ & 4036 \end{aligned}$ | - Mephisto (scarlet and black |  |  | red | 2 | 5 |  |
|  | spots, with other shades). |  | hA | mixed |  | 5 |  |
| 4037 | -Orientalis. ; . . |  | †hP | d. red |  | 10 |  |
| 4037a | -"The Shirley" (fine and distinct race) |  | hA | mixed |  | 10 |  |
| 4037b | -Flag of Truce (large, single white). |  |  | white |  | 10 | Howering. For beds or bor |
| 4039 | -nudicaule. |  | thP | yellow |  | 10 | ders, with a background of |
| 4040 | - -aurantiacum |  |  | orange |  | 10 | green, they are beautiful; they |
| 4042 | -umbrosum. |  | ha | crim. | 11/2 | 5 | are also tine for Seed should be kept from form |
| 4044 | -Danebrog |  |  | sc. \& w. |  | 5 | ing to secure continuous flow |
| 4046 4048 | -Double White |  |  | white scarlet |  | 5 | ering. |
| 4050 | --Mixed |  | $\cdots$ | mixed |  | 5 |  |
| 4052 | --Carnation-flowered |  | $\cdots$ |  |  | 5 |  |
| 4054 | --Pæony-flowered |  |  |  |  | 5 |  |
| 4055 4056 | - - Ranunculus-flowered |  |  |  |  | 5 |  |
| $4056 a$ | -Black Prince. |  |  | black |  | 10 |  |
| 4067 | Portulaca splendens | 23 | tA | purple | 1/2 |  |  |
| 4068 | -Bronze |  |  | bronze |  | 5 |  |
| 4069 | -Red Carnation-striped |  |  | strip. |  | 5 |  |
| 4070 | -Thellusonii . |  |  | scarlet |  | 5 |  |
| 4071 | -Pheasant's Eye . |  |  | r. \& w. | . | 5 | These cannot be rivaled for th |
| 4072 | -albifiora..... | 23 |  | white |  | 5 | brilliancy of their colors, an |
| 4074 | -aurantiaca. | . . |  | orange |  | 5 | are one of the best annuals fo |
| 4082 | -Light Straw |  |  | yellow |  | 5 | bedding. $P$. oculata, with re |
| 4085 | -Light Rose. | 1 |  | 1. rose |  | 5 | stalk, is very fine. The last |
| 4087 | - alba oculata (red stalk) | 2 |  | w. spur |  | 5 | seven have double flowers, and |
| 4088 4089 | -sulphurea |  |  | yellow |  | 5 | are very beautiful, many of them resembling miniature |
| 4090 | -rosea. |  |  | rose |  | 5 | roses. The seed of these al |
| 4091 | -White and Red Striped |  |  | strip. |  | 5 | ways contains many singl |
| 4092 | -Mixed. . . ${ }^{\text {der }}$ |  |  | mixed |  | 5 | flowers, which bloom earlier |
| 4095 | -Large-flowered Flesh |  |  | flesh |  | 5 | than the double ones, and may |
| 4097 | --Rose |  |  | rose salmon |  | 5 | in this way all be pulled out |
| 4100 4105 | --Balmo |  |  | salmon |  | 5 | before the double ones come |
| 4107 | --Striped |  |  | strip. |  | 5 | best in a light, sandy soil. The |
| 4111 | Double Scarlet | $\cdots$ |  | scarlet |  | 25 | will not germinate till ho |
| 4114 | -Orange.. . . |  |  | orange |  | 25 | weather setsin, and seed shoul |
| 4117 | -Carnation-striped |  |  | car. st. |  | 25 | therefore be sown late. |
| 4118 | -Salmon |  |  | salmon |  | 25 |  |
| 4120 | -White. |  |  | white |  | 25 |  |
| 4127 | -Purple |  |  | purple |  | 25 |  |
| 4130 | -Mixed. |  |  | mixed |  | 10 |  |
| 4133 | Potentilla atrosanguinea | 13 | hP | purple | 11/2 | 10 |  |
| $413 \%$ | Mixed. |  |  | mixed |  | 5 | \} Showy and hardy border |
| 4138 | Primula obconica | 2 | tgP | white |  | 25 |  |
| 4140 | cortusoides. |  | hP | red | 1 | $10$ | "Queen of Primroses." P. ob- |
| ${ }_{4141}^{4143}$ | Cashmeriana | . |  | rose mixed | 1/4 | 25 10 | conica makes a beautiful pot |
| 4145 | English Yellow Primrose |  |  | yellow |  | 10 | plant, remaining long in bloom |


the shirley poppy

salpiglossis.


SALVIA SPLENDENS.


PAPAVER DANEbRO


SUNFlower, "texas silver queen."

(IOLA TRICOLOR. (LARGE PANSY.)



NUMBER and NAME.

All Flower Seeds celivered free by mail.

|  | Stocks (German Ten Weeks)- |  |  |  |  | cts. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4534 | Dwarf Light Blue. . . | 12 | hhA | 1. bl. | 1 | 10 |  |
| 4540 | -White |  |  |  |  | 10 |  |
| 4541 | -Brilliant Rose. |  |  | br. ro. |  | 10 |  |
| 4542 | -Fine Mixed. |  |  | mixed |  | 10 |  |
|  | -Large-Flowered |  |  |  |  | 10 |  |
| $4546 a$ | - Canary Yellow. |  |  | 1. yel. |  | 10 | (Mathiola.) These seeds are |
| 4546 b $4546 c$ | -Blood Red. <br> -Shining Purple Carmine |  |  | d. red |  | $\begin{aligned} & 25 \\ & 25 \end{aligned}$ | saved from the finest double |
| 4547 | Cut-and-Come-Again . . . |  |  |  | 11/2 | 10 | varieties, but seldom produce |
| 4548 | Ordinary Mixed. . . |  |  | mixed | 1 | 5 | such fine flowers as the Ger- |
| 4550 | Intermediate White. |  |  | white | 11/2 | 10 | man varieties, which are put up |
| 4552 | -Crimson. . |  |  | crim. |  | 10 | are very fragrant, and every |
| 4554 | -Mixed. . . - ${ }^{\text {Prection }}$ |  |  | mixed |  | 10 | garden should have some of the |
| $4554 a$ | Perfection (very large) |  |  |  |  | 10 |  |
| 45543 | -Fine White . .- |  |  | white |  | 10 | can be finer. They are not |
| $\begin{aligned} & 4555 \\ & 4555 a \end{aligned}$ | Large-Flowering Emperor |  |  |  |  | $\begin{aligned} & 10 \\ & 10 \end{aligned}$ | only of attractive form and |
| 4556 | Wallfower-Leaved |  |  | white |  | 10 | color, but richly fragrant. The |
| $4556 a$ | --Crimson |  |  | crim. |  | 10 | double white sorts are largely |
| 4558 | -Mixed |  | . | mixed | $\cdots$ | 10 | used in summer for cut-flower |
| 4560 | Winter Crimson. |  |  | crim. |  | 10 | work. For assortments of Ger- |
| 4565 | -Dwarf Crimson Bouquet |  |  |  |  | 25 |  |
| 4567 | -White... |  |  | white |  | 10 |  |
| 4570 | -Finest Mixed |  |  | mixed |  | 10 |  |
| 4571 | Purple Queen. |  |  | purple |  | 5 |  |
| 4572 | Scarlet Queen. |  |  | scarlet | $\cdots$ | 5 |  |
| $4572 a$ | White Queen . |  |  | white |  | 5 |  |
| 4573 | Mixed Queen |  |  | mixed |  | 5 |  |
| $4573 a$ | Styrax Japonica. | 1 | hS | white | 6 | 10 | Bell-shaped flowers, followed by white berries; fine. |
| 4574 | Sultan, Sweet, Purple | 2 | hA | purple | 11/2 | 5 |  |
| 4577 | White . . . |  |  | white |  | 5 | (Centaurea.) Pretty border an- |
| 4580 4582 | Yellow |  |  | yellow mixed |  | 5 | nuals, with fragrant flowers. |
|  | Sunflower- |  |  |  |  |  |  |
| 4584 | Helianthus annuus, Single Russian | 3 | hA | yellow | 5 |  |  |
| 4585 | - Primrose-colored |  |  | y |  | 5 | Showy for back-grounds and |
| 4586 | -macrophyllus giganteus... |  |  |  |  | 5 | shrubberies. Like the Eucalyp- |
| 4588 | -cucumerifolius (cucumber- |  |  |  | 3 | 5 | tus, good to absorb the miasma of low grounds; the large flow- |
| 4589 | -argophyllus, "Texas Silver |  |  |  |  |  | ers are also very rich and effective. No. 4589 has silvery |
| 4590 | -California Double . . . . | 2 |  | d. $\dot{\mathrm{y}}$. | 2 to 5 | 5 | foliage and very handsome |
| 4591 | -Globe-flowered Double. | 3 | $\cdots$ | yellow | 3 | 5 | small flowers. |
| 4592 | -Green Centered Double. . |  |  | y. \& gr. |  | 5 |  |
| 4593 | -Dwarf Double. . . . . | 23 |  | yellow |  | 5 |  |
| 4594 | ---Variegated foliage | 3 |  | var. |  | 5 |  |
| 4597 | Swainsonia atrococcinea |  | gP | red | 2 | 25 |  |
|  | Swan River Daisy |  |  |  |  |  | See Brachycome, page 7 |
|  | Sweet Peas |  |  |  |  |  | See Lathyrus, page 94. |
| 4598 | Sweet William, Mixed | 23 | hP |  | 11/2 |  |  |
| 4599a | Pure White. . ${ }^{\text {d }}$ |  |  | white |  | 5 | A bed of these can hardly be sur- |
| $\begin{aligned} & 4598 b \\ & 4598 c \end{aligned}$ | Auricula-flowered Dunnettii |  | $\cdots$ | mixed |  | 5 | passed in color and habit; admired by all |
| $4600$ | Double Mixed |  |  | crim |  | 5 | mired by all. |
| 4602 | Tacsonia Van Volxemii |  |  |  | 10 | 25 | eautiful greenhou |
| 4605 | Tagetes lucida |  |  |  | 1 |  | Pretty, and fine for bedding |
| 4607 | signata pumila | 23 | hA |  |  | 5 | S See also Marigold. |
| 4610 | Tassel Flower, Scarlet | 2 |  | scarlet | 2 |  |  |
| $\begin{aligned} & 4612 \\ & 4613 \end{aligned}$ | Orange Mixed. |  | . | orange mixed |  | 5 | \} with neat flowers. |
| 4614 | Thermopsis Caroliniana. | 2 | hP | yellow | 11/2 | 25 | Pretty leguminous plant. |
| 4615 | Torenia Fournieri. | 2 | tA | purple | 1 | 25 | For borders and baskets. |
| 4616 | Trachelium cœruleum | 2 | thP | blue | 11/2 | 5 | Pretty. |
| 4617 | Tradescantia angulosa | 3 | gP |  | 1 | 10 | Interesting plant. |
| 4618 | Trifolium suaveolens | 2 | hP | purple | trai. | 5 | An ornamental clover. |




## VINES AND CLIMBERS.




## ORNAMENTAL GOURDS AND FRUIT-BEARING VINES AND PLANTS.




HELICHRYSUM MONSTROSUM.


GLOBE AMARANTHS.

## SEEDS OF EVERLASTINGS,

For the Formation of Wreaths and Winter Bouquets.


## ORNAMENTAL GRASSES.

Many of these grasses, if cut before they are entirely ripe, will be found useful in the formation of winter bouquets, in connection with the Everlastings.




## PALM SEEDS.




## IMPROVED FRENCH AND GERMAN ASTERS.

In this latitude, Asters should be sown from the middle of March to the first part of May, on a spent hotbed, or in pots or shallow boxes in a frame or in the house, and when an inch high they should be transplanted into fine soil, which should be spread over a discarded hot-bed, from whence they can be bedded out when three or four inches high. This should be done before or during showery weather. Asters do finely sown in the open ground from the middle to the last of May. The only objection to this mode is their late and short duration of flowering. They can also be grown in pots successfully. Use fine and rich soil, and keep well watered.

There is such a great variety of form and coloring in this beauitful class of plants that it is not surprising that they continue in high favor. In no other class of Annuals can such rich colors and varied fine forms be obtained, and the symmetry of the plants when well grown makes them especially handsome in pots for decorative purposes.

Qrsis In ordering these collections, please give simply the numbers of the particular Assortments desired; this will be sufficient, without the names.

## COLLECTIONS OF BEAUTIFUL ASTERS.




## GERMAN TEN-WEEKS AND OTHER STOCKS.

Sow at the same time and treat in precisely the same manner as given on preceding page for Asters, except that they may be transplanted several times with advantage in the earlier stages of growth, the shift tending to give them a more compact and dwarf habit. The flowers are of good size and handsome form, and possess a spicy and pleasant fragrance. The white varieties are much used for bouquet and Horal work.

These assortments will be found superior in all respects, containing only the very best varieties.
沱 In ordering, please give the numbers of the particular Assortments desired.

## COLLECTIONS OF STOCKS, CONTAINING-



# ASSORTMENTS OF FLOWER SEEDS. 

| Collections of |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Varieties. P | Price. | No. | Varieties. | Price |
| 176-6 | Alpine Plants | \$0 40 | 291-6 | Marigold, Double French | \$0 30 |
| 178-12 | Amarantus (ornamental foliage) | 40 | 292-6 | African | 30 |
| 180-12 | Aquilegia | 50 | 295-12 | Marvel of Peru | 45 |
| 182-6 | Balsams, Improved Camelia-flowered | 60 | 296-8 | " " | 30 |
| 184-12 | " Double Rose-flowered. | 60 | 297-6 | Striped-leaved | 30 |
| $184 a-$ | " " ${ }^{\text {" }}$, . . | 35 | 300-10 | Mignonette | 40 |
| 185-6 | Begonias, Tuberous-rooted, fine colors. | 100 | 305-12 | Nasturtium, Tall | 40 |
| 186-8 | Calliopsis . | 35 | 306-8 | " | 30 |
| 187-12 | Campanula | 50 | 307-12 | Dwarf Tom Thumb |  |
| 189-25 | Cannas (fine) | 125 | 308-8 | " " " | 30 |
| 190-12 | "، ${ }^{\text {a }}$ | 75 | 310-8 | Nemophila | 35 |
| 191-8 | " ${ }^{\text {a }}$ |  | 315-24 | Pansy or Heartsease | 125 |
| 192-6 | Dark-leaved | 50 | 316-18 | " | 00 |
| 5-50 | Carnation and Picotee | 300 | 317-12 | " ${ }^{6}$ |  |
| 196-25 | "6 " | 175 | 318-8 | " ${ }^{\text {، }}$ |  |
| 197-18 | " ${ }^{\text {a }}$. . . . . . . | 125 | 319-6 | " ${ }^{\text {" }}$ |  |
| 198-12 | " ${ }^{\text {a }}$. . . . . . . | 100 | 323-12 | Peas, Sweet |  |
| 199-6 | " " |  | 324-12 | " Eckford's New Hybrid | 90 |
| 202-6 | Centaurea Cyanus (Corn Bottle) |  | 325-8 | " ، ، .، |  |
| 205-12 | Chrysanthemums, Annual |  | 326-6 | " ، " ، | 50 |
| 200-6 | " " | 40 | 327-12 | etunias, Fine Large-Flowering |  |
| 0-12 | Coleus | 125 | 328-6 | ، ، ، |  |
| 211-6 | " |  | 329-12 | Double Fringed | 50 |
| 14-8 | Convolvulus Minor | 35 | 330-6 | " " " | 80 |
| 220-12 | Dahlia, Beautiful Single | 100 | 331-12 | Large-Flowering |  |
| 221-6 | " " ، ....... |  | 332-6 | " " | so |
| 223 | Delphinium hybridum fl. pl. |  | 338-12 | Pinks, Fine China |  |
| 224-12 | Digitalis (Fox-Glove) | 40 | 340-8 | " ، ، |  |
| 230-12 | Ferns | 125 | 341-6 | " " " |  |
| 232-12 | Fuchsia |  | 345-10 | Phlox Drummondii, beautiful | 50 |
| 233-6 | Gaillardia | 35 | 348-12 | Poppies, Double Carnation | 40 |
| 235- | Globe Amaranths (Everlasting Flowers) |  | $\begin{aligned} & 349-12 \\ & 350-6 \end{aligned}$ | " Pæony-flowered . . <br> " Double Dwarf Pæony |  |
| 237-6 | Godetia |  | 351-6 | " Ranunculus-flowered |  |
| 239-12 | Gourds, ornamental, small |  | 354-12 | Portulaca, beautiful |  |
| 242-25 | Grasses, ornamental | 75 | 355-6 | " Double | 00 |
| 43-12 | " " . . . . . . . . | 50 | 358-6 | Potentilla, " |  |
| 246-12 | Helichrysum, Double Eternal Flowers | 50 | 362-12 | Primula, Chinese Fringed |  |
| 247 | " | 45 | 363-10 |  |  |
| 248-8 | " 6 " " | 40 | $\begin{aligned} & 364-8 \\ & 365-6 \end{aligned}$ |  |  |
| 249-6 | " " " ${ }^{\text {" }}$ | 30 | 366-6 | " " Double | 125 |
| 0 | Monstrosum nanum fl. pl. | 30 | 370-12 | Ricinus (Castor Oil Bean) |  |
| 251-12 | Heliotrope |  | 371-6 | " 6 " |  |
| $5-6$ |  | 50 | 374-8 | Salpiglossis, Tall |  |
| 0-12 | Hollyhocks, Double Prize | 100 | 375-8 | Dwarf |  |
| 261-8 | , |  | 376- |  |  |
| 62-6 | " ${ }^{\text {" }}$ |  | 380-8 | Scabious, Dwarf Double |  |
| 265-12 | Ipomæas, Hardy |  | 381-6 | 6 " " |  |
| 268-5 | Jacobœa, Dwarf Double |  | 382-8 | Tall Large-flowered |  |
| 270-6 | Lantana |  | 383-6 |  |  |
| 272-12 | Larkspur, Dwarf Rocket |  | 385-6 | Schizanthus |  |
| 273-6 | " |  | 387-12 | Snapdragon, Finest Tall |  |
| 274-12 | Tall Rocket |  | 388-6 | " " " |  |
| 275-6 | " " | 30 | 390-6 | Solanum |  |
| 27\%-6 | Dwarf Candelabrum |  | 392-6 | Sweet William, fine |  |
| 278-6 | New Emperor |  | 394-12 | Tropæolum Lobbianum |  |
| 279-6 | Ranunculus-Flowered |  | 395-6 | " |  |
| 280-8 | Tall Branching . |  | 398-6 | Verbena |  |
| 281-6 | " |  | 400-6 | Xeranthemum |  |
| 284-12 | Lobelia. |  | 403-10 | Zinnia, beautiful Double |  |
| 285-6 |  |  | 404-6 | " " " |  |
| 287-12 | Lupins |  | 405-8 | " Dwarf Double |  |
| 290 | Marigold, Double French |  | 406- | " " |  |

## COLLECTIONS OF FLOWER SEEDS.

## Free by Mail at Prices Affixed.

Long experience in selecting enables us to make collections which are invariably satisfactory to purchasers, and our usual full assortment the present season, embracing every desirable novelty and standard sort, insures assortments of the rarest varieties and finest qualities, all of the growth of the past season, and in every case strictly true to name.

| Varieties. | Price. | Varieties. | Price. |
| :---: | :---: | :---: | :---: |
| 100 Annuals, Biennials and Perennials | \$400 | 50 Choice Greenhouse Seeds | \$8 00 |
| 50 " " " . | 200 | 25 " " | 400 |
| 25 " | 100 | 12 | 250 |
| 12 |  | 50 Choice American Seeds for Europ'n | Culture 400 |
| 25 More Rare Annuals | 200 | 25 | 200 |
| 10 | 100 | 12 Annuals for Bees. |  |

Sif Strictly Our Own Selection.

## LIST OF FLOWER SEEDS BY WEIGHT.

| Ageratum Mexicanum, "Dwarf Blue Gem" . 8040 | Cypress Vine, Red or White . . . . . . . . . . \$0 ${ }^{\text {Per oz. }} 40$ |
| :---: | :---: |
| Alyssum maritimum (Sweet) . . . . . . . . . 40 | Four O'Clocks (Mirabilis), Finest Mixed |
| compactum . . . . . . . . 50 | per lb., 60 cts. . . 10 |
| Asters, Mixed China . . . . . . . . . . . . . . 50 | Dwarf White |
| Truffaut's Fine Mixed . . . . . . . . . 200 | Gaillardia picta Lorenziana . . . . . . . . . 60 |
| Large Double White . . . . 200 | Globe Amaranths . . . . . . . . . . . . . . . 30 |
| Balsams, Mixed Double Paris . . . . . . . . . 40 | Holiyhocks, Splendid Double Mixed .... 75 |
| Double Pure White . . . . . . . . . . 100 | Double Crimson . . . . . . . . . 125 |
| " Scarlet. . . . . . . . . . . . 75 | " Light Lavender . . . . . 100 |
| " Pink . . . . . . . . . . . . . 75 | " White . . . . . . . . . 100 |
| Lavender | Larkspur, Dwarf Rocket . . . . . . . . . . . 25 |
| Solferino . . . . . . . . . . 50 | Linum grandiflorum rubrum (Crimson Flax) |
| Balloon Vine. . . . . . . . . . . . . . . . . . 20 | Lupinus, Mixed . . . . . . . . . . . . . . . 20 |
| Beet, beautiful ornamental sorts- | Marigold, "Meteor". |
| Ne Plus Ultra, very dark crimson foliage 15 | African Mixed |
| Dell's Black-leaved, foliage black . . . 15 | El Dorado |
| Victoria Metallic, blood-red foliage . . . . 15 | French Mixed. . . . . . . . . . . . 35 |
| Chilian Large Scarlet Ribbed . . . . . . 15 | Mignonette, Sweet . . . . . . per lb., 75 cts. |
| " Yellow " . . . . . 15 | "Crimson Queen" . . . . . . . . . 35 |
| Brazilian Crimson-Veined . . . . . . . . 15 | "Golden Queen" |
| Golden " . . . . . . . 15 | Miles' Spiral |
| Scarlet " ........ 15 | French Machet . . . . . . . . . . 75 |
| Calliopsis, Mixed Single . . . . . . . . . . . . 30 | Nasturtium, Tom Thumb "Empress of India" 35 |
| Double | " Scarlet |
| Canary Bird Flower. . . . . . . . . . . . . . 50 | Mixed . . . . . . . 15 |
| Candytuft, Best White . . . per lb., 75 cents | Nemophila, Mixed . . . . . . . . . . . . . . . 25 |
| Giant White "Empress" . . . . 75 | Pansy, Mixed; according to quality of flower |
| Dunnett's Crim | s. to 500 |
| Mixed | Peas, Sweet, Mixed . . . . . . per lb., 40 cts . 10 |
| anna, Fine Mixed. . . . . . . . . . . . . . . 20 | Petunia, Fine Mixed, spotted and striped . . . 100 |
| Crozy's Fine Dwarf sorts . . . . . . . 50 | Phlox Drummondii, Fine Mixed . . . . . . . . 50 |
| rnation Pink, Common . . . . . . . . . . . 60 | " Large-Flowering, Mixed . 75 |
| Extra Fine Double Mixed . . 300 | Dwarf Crimson Bouquet. . 200 |
| Centaurea candidissima . . . . . . . . . . . . 250 | " White Snowball . . 400 |
| gymnocarpa. . . . . . . . . . . . 75 | grandiflora splendens . . . 100 |
| Cineraria maritima (Dusty Miller) . . . . . . 40 | '. "Star of Quedlinburg " . . 200 |
| Cobæa scandens . . . . . . . . . . . . . . . . 100 | Pink, Mixed Double China . . . . . . . . . . . 40 |
| Cockscomb, Dwarf Crimson "Empress" . . . 125 | Poppy, Mixed Carnation . . . per lb., 75 cts. . 25 |
| Mixed "Glasgow Prize " . . . . . 125 | Portulaca, Splendid Mixture. . . . . . . . . . 40 |
| Scarlet Japan . . . . . . . . . . . 75 | Best Mixed Double. . . . . . . . . 500 |
| onvolvulus major (Morning Glory) Mixed | Pyrethrum "Golden Feather" . . . . . . . . 75 |
| per lb., 40 cts. . 10 | Ricinus (Castor Bean) Mixed . per lb., 75 cts . 10 |
| inor, Dwarf . " 50 cts. | Salvia splendens, rich scarlet . . . . . . . . . 150 |
| osmos hybridus, Mixed . . . . . . . . . . . . 75 | Smilax, fine climber for pots or forcing . . . . 125 |



## LIST OF FLOWERS SUITABLE FOR BOUQUETS.

Per pkt. $\$ 005$

" album.
Alyssum maritimum
Amarantus tricolor
Ammobium alatum
Aquilegia chrysantha
Aster chrysanthemiflora. alba.
Balsams, Camelia-flowered.
Cacalia coccinea.
Calliopsis lanceolata
Callirrhoe pedata
Centranthus macrosiphon.
Dwarf
Chrysanthemum inodorum
Collinsia bicolor. verna
Cuphea strigulosa miniata purpurea
Dianthus Chinensis
Digitalis, assorted
Gaillardia picta" "Aurora Borealis"
Gilia tricolor
Globe Amaranthus, assorted.
Godetia, assorted Per pkt. ..... $\$ 005$
Gypsophila paniculata
muralis. ..... 5
Heliophila araboides ..... 10
Heliotropium grandiflorum. ..... 10
Iberis odorata ..... 5
umbellata ..... 5
amara ..... 5
Kaulfussia amelloides. ..... 5
Leptosiphon (Gilia) densiflorus. ..... 5
Iobelia Erinus ..... 5
gracilis ..... 5
Malope grandiflora ..... 5
Mimulus moschatus. ..... 10
Phlox Drummondii grandiflora ..... 10
Reseda odorata "Machet" (Mignonette) ..... 10
Silene, Mixed ..... 5
Smilax (Myrsiphyllum asparagoides) ..... 10
Spraguea umbellata. ..... 25
Statice, assorted ..... 5
Stevia serrata ..... 10
Stocks, Ten-Weeks ..... 10
Verbena, assorted. ..... 5
Viola tricolor (finest) ..... 25
Viscaria oculata. ..... 5
Zinnia, all the double varieties ..... 5
LIST OF FLOWERS SUITABLE FOR HANGING BASKETS.

Ageratum Mexicanum nanum
Alyssum maritimum
Aubrietia deltoidea
Calandrinia umbellata
Cosmidium Burridgeanum
Cerastium tomentosum
Clintonia (Downingia) pulchella
Convolvulus Mauritanicus. aureus superbus
Dwarf Nasturtiums
Eschscholtzia tenuifolia
Eucharidium grandiflorum
Fenzlia dianthiflora
Gilia nivalis
rosea splendens
Heliophila araboides
Per pkt. $\$ 005$ 5 10 10 5 25 10 10 10 10

Iberis amara. . . . . . . . . . . . . . . . . . . 5
rosea
5

Per pkt.
Lobelia Erinus and varieties . . . . . . . . . . $\$ 005$ gracilis and varieties . . . . . . . . . . 5
Lupinus nanus . . . . . . . . . . . . . . . . . 5
sub-carnosus . . . . . . . . . . . . . . . 5
Mignonette . . . . . . . : . . . . . . . . . . . 5
Mimulus moschatus. . . . . . . . . . . . . . . 10
Nemophila insignis . . . . . . . . . . . . . . . 5
maculata . . . . . . . . . . . . . . 5
Pansy, varieties (finest) . . . . . . . . . . . . . 25
Petunia, spotted and striped . . . . . . . . . . 25
Portulaca, Double . . . . . . . . . . . . . . . 10
Sanvitalia procumbens (Double) . . . . . . . . 5
Saponaria Calabrica . . . . . . . . . . . . . . 5
Sedum cœruleum . . . . . . . . . . . . . . . . 10
Silene pendula ruberrima . . . . . . . . . . . . 5
Spraguea umbellata. . . . . . . . . . . . . . . 25
Verbena (finest) . . . . . . . . . . . . . . . . . 10
Virginian Stock . . . . . . . . . . . . . . . b



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| :---: |
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[^0]:    330 Half-Long Stump-Rooted. An excellent sort, of good quality .
    332 Half-Long Stump-Rooted, Nantes Strain. A popular market sor
    334
    . . . . . .
    Half-Iong Stump-Rooted, Chantenay Strain. Style of Nantes; broader shoulder
    336 Half-Long Stump-Rooted, Guerande Strain. Very thick and very short . . . . .
    338 Half-Long Stump-Rooted, Carentan. Coreless; flesh red; of fine quality . . . .
    340 Half-Tong Stump-Rooted, Iuc. Useful main crop sort; early and productive.
    342 Half-Iong Danvers. Thick; of good quality and exceedingly productive
    344 Best Long Orange. Best for stock feeding.
    346 Altringham. Long scarlet; productive.
    

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[^2]:    Your Sandwich Island Oyster-Plant Seed I received from you last year proved very satisfactory. The roots raised from it took the first prize at the Wisconsin State Fair.
    C. WYNOBLE,

    St. Francis, Milwaukee Co., Wis.

[^3]:    No. 1, 7 inches Each.
    No. 2, 8 inches
    00
    No. 3, 9 inches Each.

    250
    No. 4, 10 inches
    350

