## Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

| portions are arranged to suit large and small gardens. |  |  |  |  |
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## TWO CRAND PRITES $\begin{aligned} & \text { at the Louisiana Purchase Exposition, one for our SEEDS } \\ & \text { and another for VEGETABLES grown from our seeds. }\end{aligned}$

# J. M. Thorburn \& Co. 

ONE-HUNDRED-AND-FOURTH
ANNUAL CATALOGUE OF

## HIGH-CLASS SEEDS



HIS is our Hundred-and-fourth successive Annual Catalogue. We are growers of and dealers in High-Class Seeds only. Quality is our leading feature.

It is important that orders be sent on receipt of this Catalogue, instead of waiting till the spring, when we are so busy that there is sometimes unazoidable delay in filling them, even by night work.

Cultural Directions.-These apply to the climate of New York and vicinity. For more northern or southern localities the necessary changes in time of sowing, etc., will readily suggest themselves to gardeners.
When desired, we will select suitable seeds if the size of garden or the sum proposed to be expended is stated.

Orders should be written on our order sheet or on a blank sheet separate from letter. Orders from new customers should be accompanied by a remittance in the form of a Post Office or Express Money Order, Bank Checks or Bank Bills.

Prices.-The prices quoted are net, and do not include free transit, except for seeds in ounces and packets.

Seeds by Mail or Express.-8 cents per pound should be added if wanted by mail or prepaid express, except for seeds ordered by the ounce or packet, which we mail free. By special arrangement with the express companies we can ship seeds and bulbs at a reduction of 20 per cent from the regular rates. We do not guarantee the safe arrival of goods sent by mail ; it is rarely, however, that seeds fail to reach their destination safely in that way. Unless otherwise instructed, we send orders received from parties unknown to us, C. O. D.

Name, Address, etc.-We beg our correspondents to give us on EACH order the correct 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 sufficien ${ }^{2}$, we shall ourselves choose the most advantageous and convenient means, but entirely ai the risk of the customer.

Warranties.-Seeds of the best quality will often fail through improper treatment. Thus, a small seed may be sown so deeply that the young plant cannot reach the surface. More failures result from disregard of the conditions necessary to germination than from inferiority of the seeds used. 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 rapidly 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 $60^{\circ}$. For 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 small a portion. The proper amount is that which a welldrained 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 germinati $n$ 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 continuous drying wind, may check their growth, or destroy them altogether. In addition, there are numerous insects, both below and above ground, that may attack the plants, some of them being so small that they often destroy a crop before they are discovered. We may also mention the well-known tendency of many vegetables to revert to their original types, notwithstanding the care of the seed-grower ; the yellow-podded wax Beans becoming green, the yellow and white Celery becoming more or less green, dwarf Peas becoming running sorts, etc.

Messrs. J. M. Thorburn \& Co. give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any seeds, bulbs or plants they send out, and they will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.
F. W. bruggerhof, Pres.
E. e. bruggerhof, V. Pres. \& treas.

## J. M. THORBURN \& CO.

R. R. MACKENZIE, SECY.

## 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. The exposure for a vegetable garden should be perfectly 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 underdrained 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 subsoiling, unless manure and money both be abundant. A sandy soil may be greatly improved by adding more or less vegetable mould from the woods. To produce the best 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 evergreen, 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 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 ; but whether weeds appear or not, the ground should be frequently stirred.

Much time may be gained by starting certain kinds of plants in a hotbed, or even in a coldframe, the latter being a very convenient thing, even on a small place. The hotbed is chiefly intended for raising early Tomatoes, Eggplants, 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 hotbed may be dispensed with, especially on small places.

To prepare a coldframe. - The coldframe 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 io or 12 inches a liberal quantity of old, well-rotted manure. The manure of an old hotbed is good for the purpose. The frame is prepared in the fall, and young Cabbage, Cauliflower and Lettuce plants are 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 2oth of September, but the very early kinds some 8 or io days later. The young plants will be ready to transplant in about 25 or 30 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 coldframe 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 Hotbed

In the vicinity of New York, from the first to the latter part of March is quite early enough to make a hotbed. The time must vary according to the latitude. 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 severely 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 $21 / 2$ feet deep, and of a size suited to the number of plants required. The pit wlll be better if built up of brick. It should be made in some dry sheltered spot, facing the south or east, if possible. Hotbed sashes are usually $3 \times 6$ feet, and one or two sashes will give early plants enough for a small family. The frame for sashes sh uld be 18 inches high at the back and 12 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, 2 to $21 / 2$ 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 6 to 8 inches. The heat may be readily ascertained by plunging a thermometer into the manure. The soil should be of 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 2 to 3 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 snowstorms keep covered with mats or board shutters. Tomatoes, Peppers and Eggplants should be sown in a separate frame from Cabbage, Cauliflower and Lettuce, as they require more heat. The same directions may apply to hotbeds made on the surface of the ground, except that the manure should be at least a foot wider on all sides than the frame.

## MATS FOR COVERING SASHES

Size, 76 ins. $x 76$ ins. Each
No. I. Both sides jute . . . . . . . . . . \$I 25
No. 2. One side jute, the other side water-
proof duck

HOTBED SASHES
We can supply the best quality as follows:
 Glazed . . . . . $3 \times 6 \mathrm{ft}$. . . . . . 3 oo 35 oo

## THORBURN'S GREAT NEW POTATO Noroton Beauty

Received Silver Medal of the American Institute (the highest award ever given to a novelty), also a Certificate of Merit from the Suffolk County Horticultural Association and the Tuxedo Horticultural Society.

## The Most Valuable Potato Ever Introduced

It is just forty years since we introduced the long-popular White Peach-Blow, a variety which, in its day, represented the highest achievement in the improvement of the Potato. Since then the path of progress is marked step by step by our introductions: Late Rose, Beauty of Hebron, White Elephant, The Thorburn and Rural New-Yorker, till in 1894 came the world-famous Carman No. r and Carman No. 3, the best main-crop Potatoes in cultivation today. And now, just ten years later, we are marking another forward step with our Noroton Beauty, a lineal descendant of the famous PeachBlow, being a seedling from a seedling of that variety. The name Noroton Beauty refers to our trial grounds at Noroton, Comn. Noroton is an Indian name and is accented on the second syllable. Before giving the opinions of leading authorities who have tested it, we may summarize its merits as follows:

It is the earliest Potato ever grown, being sixteen days earlier than the Early Rose!
Yet it is fully as productive as any main-crop or late sort. This combination of extreme earliness, productiveness and keeping qualities has never before been attained.
It is handsomer in appearance and more uniform in size and shape than any other variety.
The tubers mature simultaneously, a fact which, combined with its extreme earliness, practically
does away with danger from blight or disease or bugs.
Its table quality is superb and it keeps longer than any other sort, early or late.
It is the hest all-round Potato in existence.

PRICES
By mail or express By express or freight
prepaid not prepaid


Our name is known the world over in connection with the improvement of the Potato, so that the announcement of a new variety by us excites unusual interest and a great demand. When we introduced the Carman No. 1, ten years ago, we had to return thousands of dollars in cash because of the demand so far exceeding our supply. We anticipate an even larger demand for this Potato, and you should, therefore, order early.

On the back of the colored plate will be found the opinions of disinterested authorities to whom we sent a luber for trial last season. We invite special notice of the extraordinary statement with which Mr. E. L. Coy, the highest American authority on Potatoes, closes his leiter: "I have watched it in all stages of grozeth and tested it seareal times on the table, and I know that I am not mistaken in thinking it is the most valuable Potato ever introduced."

# Novelties and Specialties in Vegetable Seeds 

New Upright Sweet Salad Pepper

A cross between the Chinese Giant and Mild Sweet Harold. The handsomest, most productive and finest-quality Pepper yet produced. Large, smooth, thick-fleshed, mild and very sweet. Bright scarlet in color. Plants are strong and begin bearing early. The Peppers, as large as Ruby King, are all borne upright, and held clear of the ground. The flesh is so thick and skin so tender that it may be fried like a beefsteak, and so sweet that it may be eaten like an apple. Pkt. I5 cts., 2 pkts. 25 cts .

## New Cabbage, The Volga

This is a selection from a trial packet sent a few years ago from Russia to one of the largest Long Island cabbage growers, who considers it the nearest approach to perfection of any variety he has ever seen. It is remarkable for uniformity and solidity, the heads being of about equal size and weighing from 12 to 15 pounds, each. It is extremely hardy, and like all vegetables that come from cold countries remarkably quick-growing, maturing heads fully two weeks earlier than any of our late-growing kinds. The quality is very fine, the flesh being exceedingly firm, tender and white. Pkt. Io cts., oz. 40 cts.

## New Lettuce, May King

A new Cabbage Lettuce, originated by a German market-gardener and coming to us with the highest recommendation from that country. The heads are globular, extra large and very solid, light green outside with clear yellow heart, very tender and of finest flavor. Its most valuable characteristic is its extremely rapid growth, its large heads being developed quicker than any other, either in frames or out-of-doors. Pkt. ro cts., oz. 40 cts.

## Giant Neapolitan Squash

This remarkable Squash grows to a length of 4 to 6 feet and weighs go to ico pounds. The seed cavity is confined to the one end of the fruit, the rest of it being filled solid with fine-grained, orangeculored, very sweet flesh of a peculiarly agreeable musky flavor. Pkt. io cts.. oz. 30 cts.


NEW TOMATU, 1.1.1NLSTON'S GLOBE

## New Tomato, Livingston's Globe

In shape it is notably distinct, being a beautiful globe, with quite a percentage of elongated fruits. It is amony the first to ripen; fruit of large size, and a good marketable size is maintained throughout the season ; always smooth, firmfleshed; ripens evenly, through and through ; a fine glossy rose in color, tinged with purple; very productive. A remarkably good keeper ; especially adapted to slicing or eating from the hand, as the flavor is very delicate and agreeable. Pkt. 20 cts., 3 pkts. 50 cts., 7 pkts. $\$$ r.

## Japanese Winter Salad, "Udo"

Botanically this plant is Aralia cordata, which has been known in America for some time as an ornamental plant. The edible portions of the plant are the young shoots, which are blanched tike celery. They are of a white silky color, crisper than celery and with a slight pine flavor. Sow in early spring and transplant the seedlings the following spring and set in rows 2 feet apart and ro inches in the row. In the fall cut the stems off close to the rootstalks and cover with earth to a depth of 2 feet. In six weeks the piled-up earth may be removed and the new shoots found ready for cutting. Pkt - cts., oz. 40 cts.

## Novelties and Specialties in Flower Seeds



NEW HARDY ANNUAL, NICOTIANA SANDERAE

# NEW HARDY ANNUAL Nicotiana Sanderæ 

Awarded a unanimous First-class Certificate of the Rosal Horticultural Society; also the Silver Banksian Medal, and the Gold Medal of the Royal Horticultural Society. Awarded, also, First-class Certificate by the National Society of Horticulture of France.

This plant is claimed to be the most valuable hardy annual introduced in the past half century. It is the result of a cross between Nicotiana affinis and a species discovered a few years ago in Brazil. The extreme floriferousness of the plant is shown by our illustration, while its brilliant carmine color is shown on the back of this catalogue. The originators describe it as follows: "Nicotiana Sandera bears large, brilliant carmine-red flowers on bushy, freely branching plants 2 feet high; the shape of the flower resembles that of affinis, but has a short, stout tube; it comes true from seed. Plants raised in spring in the same manner as any of the hardy annuals flower in May, give a continuous display of bloom all the summer and autumn in the open ground, and make extraordinary branched specimens, retaining their leaves to the base. Among Nicotiana we know nothing approaching it in point of floriferousness, nor in its graceful and copiously branching habit. The whole plant is laden with flowers from base to summit-literally ablaze with most handsome carmine-red blossoms. Its combined hardiness and character of producing flowers continuously under all circumstances in every kind of soil and situation are undeniable recommendations, and we certainly know of no plant that produces such an abundance of blossoms for the little care that it is necessary to bestow on it. It possesses all the best qualities of Nicotiana affinis, but bears myriads of lovely calanthe-like blossoms and is decidedly much more branching in habit, and of far greater floriferousness than any other Nicotiana. Although the scent of $N$. Sanderce is not so powerful as that of its white parent, it yet possesses a decidedly sweet odor. This hardy plant, with its rosy carmine flowers, produces a startlingly beautiful effect, and is charming either in flower beds, shrubbery borders, or in the wild garden, whether in the background or in the open. It should be sown in January, pricked out, and transplanted in May in the position where it is intended to flower." Pkt. 25 cts., 5 pkts. $\$ \mathrm{I}$.

## Aquilegia, Long-spurred Double-flowering Hybrids

These are double-flowering hybrids of our beautiful native Rocky Mountain Columbine, Aquilegia cerulea. The graceful blossoms are formed of several rows of cornucopia-like petals and present mainly various shades of yellow, light and dark blue and white, all being of the so-called long-spurred type. The seed is very sparingly produced, but having been saved exclusively from the most exquisite flowers will be sure to yield a satisfactory percentage true to the type. Pkt. 30 cts.

## Campanula Amabilis

A very handsome hardy species from the Crimea, with large flowers of a lovely light blue color nearly two inches in diameter. The many-branched flower stems are 2 to 3 feet high. Pkt. 25 cts.

## Begonia, Tuberous-rooted, "The Bride"

A splendid new tuberous-rooted Begonia, producing large flowers of about $4 \frac{1 / 2}{}$ inches in diameter of a soft pure pearl-white, with sharply defined cherry-red center; a strikingly handsome combination of color. The strong flower-stalks stand clear of the fine dark green foliage. Pkt. 35 cts.

## Sweet-scented Diadem Pink (Dianthus plumarius diadematus)

A distinct and most valuable novelty. Possessing all the beauty of the Indian Pink combined with the sweet fragrance of the finest Scotch Pink. The beauty and combination of coloring and the richness of markings are beyond description. Our illustration can give only a suggestion of them. It is a very free blinomer and becomes more so every year. Pkt. 25 cts .

## Dianthus laciniatus mirabilis

A new and quite distinct strain of the popular annual Japan Pinks. The plants grow about a foot high and produce flowers 3 to 4 inches in diameter on stiff, upright stems. The petals of the Howers are very deeply cut into fine strips or thread-like fringes for nearly half their length, and these fringes are twisted in all directions. They exhibit all shades of color from pure white and white with pink zones to rose and deep purplish red. They are excellent for cutting as well as for the flower garden • Pkt. 2oc.

## New Hybrid Dianthus

A cross between D. barbatus (Sweet William) and D. Chinensis (Chinese Pink). A magnificent new hardy plant. Blooms quickly from seed. The freest blooming and most decorative of all hardy Pinks. Grows I2 to 16 inches high, very compact; foliage intermediate, but resembles Sweet William most. Flowers average 2 inches across, in trusses all over the plant, finely finished and sweet-scented. Colors vary from white to deep crimson, beautifully marked. Blooms constantly from early June until frost. Hardy without protection. Lives four years. Pkt. 35 cts.

## Calceolaria hybrida grandiflora, Separate Colors

By long-continued selection separate colors of Calceolarias have been fixed in five distinct shades; viz., white, rose, scarlet, white blotched rose and white blotched carmine. They come fairly true from seed and are highly recommended. We offer the colors mentioned in mixture. Pkt. 35 cts .

## Australian Star Flower (Cephatipterum Drummondi)

SWEET-SCENTED DIADFM PINK (Dianthus plumarius diadematus)

A half-hardy annual lately discovered in West Central Australia and never before offered. This surpassingly unique and beautiful
 plant grows readily from seed in any ordinary garden soil, preferring a rather sandy one. Blooms early in the season and continues in bloom for a long time. The fragrant flowers are of a peculiarly pleasing rosy crimson shade, sometimes approaching pure white; are produced in large, graceful clusters which when cut will retain their form and color in perfection permanently, no other flower in any way equaling it in grace and keeping qualities. Full-grown plants are about one foot high and the same across. It can be sown early in the open ground, or may be started early in the house and transplanted. Pkt. 25 cts.

## Dahlia, Single Black-leaved "Lucifer"

A unique and most striking novelty. The leaves are of a metallic black-brown hue and the flower-stalks absolutely black. The flowers are of a glowing dark scarlet, merging toward the center into deep blood-red, are produced in great abundance and thrown well clear of the dark foliage, forming a most brilliant contrast with it. Growing about $21 / 2$ feet high the plant is highly effective even as a single specimen, but much more so when several are grouped together on a lawn. It also makes an excellent long-keeping cut-fower, its magnificent mctallic
dahlia, single black-leaved "LUCIFER"

## "Star of Love" Forget-me-not

A charming new and distinct variety of Myosotis alpestris. The flowers are very large and of a beautiful blue color. The plant is of dwarf, compact habit and is especially fine for forcing. Pkt. 25 cts.

## Pennisetum macrophyllum atrosanguineum

A quite distinct new species of this popular ornamental grass, growing to a height of about 4 feet and with strikingly handsome, dark purple foliage. Pkt. 30 cts.

## The New Sweet Pea, "Cladys Unwin"

The finest pink Sweet Pea yet introduced. It has a very large and bold flower, not hooded, but with a very striking upright crinkled or wavy standard and broad wings. Color, a pale rosy pink. A striking feature is that about 75 per cent of the long flower-stems are with four blooms, which is a most unusual thing in Sweet Peas. It was first raised four years ago, and has kept perfectly true and fixed in character each year since. It was shown last season at the flower shows in England, and all the horticultural papers speak very highly of it. Pkt. ( 25 seeds) 25 cts.

## Red Perennial Sunflower

A cross between Echinacea hybrida and Helianthus multiflorus. The plant grows 5 or 6 feet high, with flowers from 4 to to inches in diameter. The disc is flat, and the ray-florets spring from it horizontally. The flowers are excellent for cutting, as they last a long time and have stems $11 / 2$ to 3 feet in length. If sown early indoors they will


BURPEE'S BUSH DOLICHUS bloom the first season, but they do not reach perfection till the second year. Pkt. 30 cts.

## Burpee's Bush Dolichos

A very attractive and quite distinct new variety from Japan. The flowers resemble those of the well-known Daylight Dolichos, but the plant is of bushy habit, averaging Io inches in height, with large leaves, above which the fine flower-spikes rise to a height of ro or 15 inches, as shown in the illustration. It makes a showy plant when grown singly or among other plants. It is easily grown from seed sown in the open ground after danger of frost is past. Pkt. 25 cts .

## Impatiens Holstii

Discovered in East Africa in 1902. It resembles I. Sultani in foliage and shape cf Hower, but it grows much quicker and the flowers are larger and brighter colored. It forms elegant bushes about 2 feet high, with flowers measuring $11 / 4$ to $13 / 4$ inches across, of a brilliant vermilion color. Sown indoors in March and set out end of May the plants will bloom continuously from June until frost. Pkt. 25 cts.

## New Salvia splendens, Golden Blotched Foliage

A most attractive new strain with light green leaves blotched light golden. The plant is of very compact habit, about 20 inches high by the same diameter, with the bright scarlet flower-spikes standing clear above the toliage ; extremely floriferous. Pkt. 25 cts.

## Schizanthus Wisetonensis

The elegant, compact pyramidal form of this fronderfully showy plant is shown by our illustration. It grows about 16 inches high, with a multitucle of large panicles of beautiful blossoms borne well above the charming feathery foliage. The ground color is white, dotted with rose, with a spot on the upper lip varying in color between golden yellow and bright brown. It continues to bloom for six or eight weeks, and is specially suitable as a house pot-plant. Pkt. zoc.

## Scutellaria Baicalensis coelestina

A hardy peremial with bulbous roots, bearing racemes of beautiful blue flowers spotted white, and resembling in form those of Siatia patens. The plant is of erect habit, 15 to 18 inches high, with rich green foliage. Coming from Siberia, it is perfectly hardy. Easily grown from seed or from cuttings. It prefers a sumny situation. Excellent for cutting, as well as for the flower border. Pkt. 25 cts.

## Phlox Drummondii, "Sirius"

When opening, the flowers are of a brilliam salmon-rose, changing into a lighter rose toward the center and with a bluish center, -a rare and unique coloring. The plants are of medium height and extremely hardy and free-blooming. Pkt. 20 cts.

## Platycodon macranthum (New)

A selection for twenty-four successive years from the original $P$. Nariesii, now lost to cultivation. Very dwarf, never exceeds 3 feet in height. Blooms in a few weeks from seed when plants are 4 inches high. Lives
 8 to io years, and forms large clumps. Never blown over by storms, like $P$ ? grandiflorum. Flowers 3 to 5 inches across, intense bright blue. One of the most valuable hardy flowering plants in existence, good for borders, beds, etc. Pkt. 35 cts .

## New Star Primula (Primula Stellata)

Within the past few years it has become one of the most popular house or conservatory plants. The plants are extremely floriferous and continue in flower for a long time. The ctit fowers remain fresh in water for many days and are thus most valuable for table decorations. They require the same cultural treatment as the Chinese primrose. We offer the following fine new sorts:

White Star. Pure white
pkt. 50 cts .
King of the Star. Deep carmine: splendid 50 "
Mixed Hybrids. All colors, very free-flowering 50 "

## Acidanthera bicolor

A gladiolus-like bulb, growing 2 feet high, bearing in July and August spikes of pure white swect scented flowers with a large triangular black blotch in center The flowers measure over 2 inches across, with tubes 6 inches long. The bulbs must be kept warm and dry over winter. Ours is probably the only stock in America. Bulbs 35 cts. each, $\$ 3$ per doz.

## New Yellow-flowered Spotted Leaf Calla

A cross between Richardia Adlami and R. Flliottiana, growing about 2 feet high, with immense dark green leaves spotted and blotched with silvery white. The flowers are of medium size, well opened, pure bright yellow with a black-purple blotch at base. They keep fresh for several davs after cutting. It blooms outside all summer. In fall the bulbs should be taken up and stored dry till next season, like gladioli. 35 cts. each, $\$ 3$ per doz.

## Vegetable Seeds

120 Please notice that we pay postage or express charges on all seeds in packets or ounces.
Ree inside front cover of this Catalogue for Complete Assortments of Vegetable Seeds of approved and choice sorts for from $\$ 5$ to $\$ 25$.

## ARTICHOKE

## Artichaut Alcachofa $\mathfrak{A r t i d}$ odfe

Culture.-Deep, rich, sandy loam, with plenty of well-rotted manure. Sow seeds in April or May, and when large enough transplant into rows 3 to 4 feet apart and 2 feet in the rows. They reach maturity the second year. When cold weather sets in bank the earth to the top, first cutting off and tying up the leaves so that they will occupy less space, and in the spring fork in a dressing of manure. Artichoke may also be treated as an annual by sowing the seed in hotbed during February and transplanting in May. The heads should be cut off and used as they get ready. If left to ripen on the plant they will exhaust it, and no more will be produced that season. Heads are unfit for culinary purposes after the flowers expand.


## ASPARAGUS

## Asperge Esparrago Epargel

Culture.-Sow the seed thinly in rows ifoot apart in April or May ( 4 to 5 lbs . to the acre), and keep down all weeds. To secure strong, healthy plants, thin out the seedlings to 3 or 4 inches in the rows, saving only the strongest. The 1 -year-old plants should be set out in spring, in a rich, sandy loam, dug 18 inches deep, into which has been worked plenty of well-rotted manure. If a stiff clay soil is all that can be had, add plenty of sand and sifted coal ashes to loosen it up, and also see that it is well underdrained. In planting for private use, set out in beds 5 feet wide, three rows in a bed, the outer being each I foot from the edge, and allow i2 inches in the rows; set the plants at least 6 inches below the surface. If set out in autumn, top-dress with 6 inches of manure. For market on a large scale, set out 4 by $I^{1 / 2}$ 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 closely. The roots need the benefit of some foliage during the year, else they will weaken and die.

$$
\text { Per pkt. Oz. } 1 \text { 1/4b. } \mathrm{lb} .
$$

Io Colossal. The most approved and standard sort. The famous Argen-
teuil of the French is identical with it
I2 Palmetto. Of southern origin ; a very desirable bright green Asparagus. ${ }^{\text {P }}$. 05

| \$O | Io | $\$ 0$ | 20 | $\$ 0$ |
| ---: | ---: | ---: | ---: | ---: |
| 10 | 20 |  |  |  |
| 10 | 25 | 50 |  |  |
|  | 25 | 75 |  |  |

## ASPARAGUS ROOTS



## 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; the great care given to their improvement has resulted in superior sorts, greatly extending the season of use, as well as varying the flavor.

Culture.-About the first of May, if the ground is perfectly warm, select a warm, dry, sheltered spot; dig and manure slightly; make drills 2 inches deep and 18 inches to 2 feet apart; drop the beans 3 inches apart in the drills, and cover not more than 2 inches deep. Hoe well in dry weather to keep down the weeds. Sow every two weeks for a succession.

## DWARF GREEN-PODDED SNAP BEANS

We supply packets of all Beans at so cts. each, postpaid

Perpt. Qt. 1/2pk. Pk. Bus.

| $\$ 0$ | 35 | $\$ 1$ | 25 | $\$ 2$ | 00 | $\$ 7$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 30 |  | 85 |  |  |  |  |
| 30 |  | 85 | 1 | 50 | 500 |  |
| 30 | 1 | 00 | 1 | 50 | 500 |  |
| 30 | 00 |  |  |  |  |  |

38 Everbearing, or Inexhaustible. A new and quite distinct variety; very prolific, and continuing to bear for a long time. Pods green and flat ; beans small, white, kidney-shaped

## DWARF GREEN-PODDED SNAP BEANS, continued



## ENGLISH DWARF BEANS

## Fevede Marais Haba Grobe $\mathfrak{B o b n e n}$

Culture.-Sow in drills 2 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 the same as for Dwarf Beans. A strong soil suits them best.

Properly cooked, these Beans form one of the most delicious vegetables. To each $1 / 2$ gallon of water allow i heaped tablespoonful of salt. The Beans should be young and fresh gathered. After shelling put them into boiling water, salted as above. Boil rapidly for 15 or 20 minutes, then serve with a sauce of parsley and butter. Boiled bacon is often served with the Beans.


## DWARF WAX BEANS

## We supply packets of all Beans at 10 cts. each, postpaid.

Golden Crown, Stringless Wax. Very productive, stringless, round pods; very early; fine quality
ro6 Refugee Wax, Stringless, Thorburn. A perfect Refugee, with long round, wax pods; suitable for early or late sowing ; immense yielder
Qt. 1/pk. Pk. Bus.

Black Wax Challenge. An extra-early strain ; round pods . . . $\$ 0$| 20 | $\$ 0$ | 35 | $\$ 1$ | 25 | $\$ 2$ | 25 | $\$ 8$ | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | Wax, Currie's Rust Proof. Large flat pods; very early and productive

Black Wax, Improved Prolific. Very early and prolific. The pods are round, full, stringless, and of fine quality
Black Wax, Pencil-Pod. Very slender, long, round pods .
Davis Kidney Wax. Long, handsome waxy white; flat pods 20
Detroit Wax. Very much like Golden Wax ; flat pods . . . . . 20
Flageolet Red Wax. Flat, yellow, stringless pods of great size . . 25
Golden Wax Improved. Very early; flat pods, long, stringless
Golden-Eyed Wax. Very hardy and prolific, with flat, yellow pods ; very early and free from rust ; a very desirable and popular sort und Pod Kidney $\dot{W}$ ax (Brittle $\dot{W} a x$ ). Same as Wardwell's Kidney, but with round pods

Valentine Wax, Thorburn. First in earliness, first in productiveness, and first in quality. A perfect Valentine Bean, with wax pods
no Wardwell Kidney Wax. Early; long, flat, purely wax pods

## WHITE BEANS

4. We supply packets of Beans at io cts. each, postpaid

Per pt. Qt. 1/2pk. Pk. Bus. 120 Thorourn Lwarf Lima (the true Kumerle Strain). The dwaif form of our famous Challenger Lima--the finest of all Limas. It possesses the flavor of the genuine Challenger Lima, thus differing from all other Bush Limas. It is exceedingly productive, bearing from 50 to 60 pods on the bush . . .. . . \$0 20
I Burpee Bush Lima. A bush form of the large flat Pole Lima, growing only 18 or 20 inches high. It is an immense yielder . 20
122 Henderson Bush Lima, or Dwarf Sieva. Productive . . . . . . .
123 New Wonder Bush Lima. Very dwarf ; flat beans . . . . . . . . 20
124 White Kidney. Excellent, either green or ripe . . . . . . . . . . 15
125 White Marrow. Good, either as a string or shell Bean . . . . . I5
126 White Flageolet. Small, white Beans, used shelled

| $\$ 0$ | 35 | $\$ 1$ | 25 | $\$ 2$ | oo | $\$ 7$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 50 |  |  |  |  |  |
| 35 | 1 | 25 | 2 | 00 | 7 | 00 |
| 35 | I | 25 | 2 | 00 | 7 | 00 |
| 35 | I | 25 | 2 | 00 | 7 | 00 |
| 25 |  | 75 | 1 | 25 | 4 | 50 |
| 25 |  | 75 | 1 | 25 | 4 | 0 |
| 25 |  | 75 | 1 | 25 | 5 | 00 |

## POLE, or RUNNING BEANS

## We supply packets of Beans at Io cts. each, postpaid

Culture - Sow as the soil becomes warm and dry, from the first part of May (for all except Limas) to the latter part of May, in hills 4 feet each way. Limas should not be planted until warm weather has fairly set in. One quart of Limas will plant about soo hills,


EXTRA-EARLY REFUGEE (See page ix ) allowing four or five beans to a hill, and of the smaller sorts about 200 hills. Poles 8 or to feet long should be firmly set in the hills before planting seed.
ı40 Lima, Challenger. Thick and productive. Best of all Pt. 20 cts ., qt. 35 cts., $1 / 2$ pk. \$1.25, pk. \$2, bus. $\$ 7$.
142 Lima, Large White. Largely grown and highly esteemed. Pt. 2, cts., qt. 35 cts., $1 / 2 \mathrm{pk} . \$ 1.25, \mathrm{pk} . \$ 2$, bus. $\$ 7$.
143 Lima, King of the Garden. Large in pod and bean. Pt. 20 cts., qt. 35 cts., $1 / 2$ pk. $\$$ I. 25 , pk. $\$ 2$, bus. $\$ 7$.
I44 Lima, Dreer. Thick, and of fine quality. Pt. $20 \mathrm{cts} ., ~ q t . ~ 35$ cts., $1 / 2 \mathrm{pk} . \$ \mathrm{r} .25$, pk. $\$ 2$, bus. $\$ 7$.
145 Lima, Small Sieva, or Carolina. Very early and productive. Pt. 20 cts ., qt. 35 cts., $1 / 2 \mathrm{pk}$. $\$ 1.25$, pk. $\$ 2$, bus. $\$ 7.50$.
I46 Lima, Willow-Leaf. Small, very productive. Pt. 20 cts., qt. 35 cts .; $1 / 2 \mathrm{pk} . \$ 1.25$, pk. $\$ 2$, bus. $\$ 8$.
147 Black German Wax. Yellow pods. Pt. 20 cts., qt. 35 cts., $1 / 2 \mathrm{pk} . \$ \mathrm{r} .25, \mathrm{pk}$. $\$ 2.25$, bus. $\$ 8$.
148 Dutch Case-Knife. Pods long, green and flat ; can be either snapped or shelled. Pt. 15 cts., qt. 30 cts., $1 / 2 \mathrm{pk} . \$ \mathrm{r}, \mathrm{pk} . \$ \mathrm{r} .75$, bus. \$6.
149 Horticultural Pole. Good as a snap or as a shell Bean. Pt. I5 cts., qt. 30 cts., $1 / 2 \mathrm{pk}$. \$1, pk. \$1.75, bus. \$6.
150 Horticultural Golden Carmine Podded. Very handsome large stringless pods. Pt. 20 cts ., qt. $35 \mathrm{cts} ., 1 / 2 \mathrm{pk}$. \$1.25, pk. \$2.25, bus. \$8.
152 Golden Cluster Improved. Long golden yellow pods in clusters. Pt. 20 cts., qt. 35 cts., $1 / 2 \mathrm{pk}$. $\$$ I. 25 , pk. $\$ 2.25$, bus. $\$ 8$.
153 July Runner, Tall. Earliest of all Pole Beans; medium height ; very freebearing ; round, green pods, stringless ; beans small. Pt. 20 cts., qt. 35c., 1/2pk. \$r.25, pk. \$2., bus. \$7. Kentucky Wonder (0!d Homestead). Pods green, very long and flat. Pt. 20 cts., qt. 35 cts., $1 / 2$ pk. $\$$ r.25, pk. $\$ 2$, bus. $\$ 7.50$.

## POLE, or RUNNING BEANS, continued

Lazy Wife. Lone creen pods of good quality; white beans Per por
157 Mont d'Or. Earls, productive ; golden wax pods . . . . . I5
${ }_{15} 8$ Scarlet Runner. A popular English Pole Bean ; very ornamental. 15
159 Southern Creaseback. Long, round, stringless pods; fleshy, tender is
160 Southern Prolific. A continuous bearer . . . . . . . . . . . .
15
16i White Dutch Runners. Same habit as the Scarlet Runner . . 20
164 Yard-Long French. Pods sometimes grow from 2 to 3 feet long,
and are very slender, like a pipe-stem ; very curious; should
be grown on pea brush
1/2pt., 25 cts.

| Qt. | 'z1,k. | Pk. | Bus. |
| :---: | :---: | :---: | :---: |
| \$0 35 | \$125 | \$200 | \$700 |
| 30 | 1 (1) | 175 | 600 |
| 30 | I 10 | I 50 | $5: 0$ |
| 30 | -o | 175 | 650 |
| 30 | I (x) | 150 | 550 |
| 35 | 125 | 200 | 7 (x) |

## BEETS

## Betterave Remolacha Galatriube

CuIture.-Sow as early in the spring as the ground can be worked ( 5 to 6 lbs , to the acre), and every two weeks after for a succession up to the first week of July. For general crop, sow about the middle of May: The soil should be light, sandy loam, well enriched with stable manure, and plowed and harrowed until very fine. Sow in drills ifont to 15 inches apart, and when well up thin from $f$ to 6 inches. The young Beets, with their tups, pulled out of the row are excellent used as Spinach. For this purpose sow frequently and use when size of a hickors nut.
185 Bassano. Early, light-colored. Pkt. 5 cts., oz. 10 cts., $1 / 4 \mathrm{lb} .20 \mathrm{c} ., \mathrm{lb} .50 \mathrm{c}$.
186 Bastian. An early, light-colored turnip Beet. Pkt. 5 cts., oz. 10 cts., $1 / 4 \mathrm{lb}$. $20 \mathrm{cts} ., \mathrm{lb} .50 \mathrm{cts}$.
IS7 Columbia. Round, smooth-skinned variety, with deep blood-red flesh. Pkt. 5 cts., oz. 10 cts., $1 / 4 \mathrm{lb} .20 \mathrm{cts}$., lb. 50 cts.
iSS Crimson Globe. Fine globular shape ; flesh rich, deep purple ; fine quality, very tender and sweet. Plit. 5 cts., oz. Ic cts., $1 / 4 \mathrm{lb} .20 \mathrm{cts} ., \mathrm{lb} .60 \mathrm{cts}$.
IS9 Detroit Dark Red Turnip. Round; skin dark blood-red; flesh bright red. Pkt. 5 cts., oz. Io cts., $1 / 4 \mathrm{lb} .20 \mathrm{cts} .$, lb. 60 cts.
190 Dewing Early. Of fine form and flavor, and good for market. Pkt. 5 cts., oz . Io cts., $1 / 1 \mathrm{lb} .20 \mathrm{cts} ., \mathrm{lb} .50 \mathrm{cts}$.
192 Early Blood Turnip. Dark red; fine flavor; good for winter. Pkt. 5 cts., Oz. Io cts., $1 \neq 1 / \mathrm{lb} .20 \mathrm{cts} ., \mathrm{lb}$. 50 cts .
193 Eclipse. Very early ; round-rooted and bright red. Plit. 5 cts., oz. 10 cts., $1 / 4 \mathrm{lb} .20 \mathrm{cts}$., 1b. 60 cts.
19.4 Edmand Blood Turnip. A marketgardener's strain of great regularity in shape, and very dark flesh of best quality. Pkt. 5 cts., oz. Io cts., $1 / \mathrm{lb} .20 \mathrm{cts} ., \mathrm{lb} .60 \mathrm{cts}$.
195 Egyptian. Very early and of dark blood color; rather flat in shape, Pkt. 5c., oz. Ioc., 1/4b. 20c., lb. 50c. $19^{5}$ Egyptian, Crosby's. Extra-early, round, dark red. Pkt. 5 cts., oz. Io cts., 1/4 lb. $20 \mathrm{cts} ., \mathrm{lb} .50 \mathrm{cts}$.
2 Io Half-Long Blood. Fine dark strain for winter
2 Lentz. Extra-early, large, round, light red ; small tops
222 Long Smooth Blood. A good late variety for winter
226 Turin. Very early, round, deep blood color ; tender . . . . . . . . . . o5
230 Swiss Chard, or Silver Beet


## FOLIAGE BEETS

These varieties are grown only for their handsome foliage, which is very ornamental and decorative.


# MANGEL-WURZEL, SUGAR BEETS, ETC. 

## Æunfelrüben

Culture.-As all Mangels require a deep soil in order to grow well, plow and subsoil at least a foot to 18 inches; and apply plenty of rich stable or Thorburn's Complete Manure. Sow in May or June ( 5 to 8 pounds to the acre), in rows 18 inches to 2 feet apart, and thin to 8 inches in the rows. Young plants may be transplanted to fill up vacancies. Sow in addition, when the plants are 3 to 4 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 perliaps 6 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 6 inches of either salt-hay, straw, sea-weed, or corn-stalks. Lest this covering be displaced by the wind, a light layer of earth is necessary. As soon as this surface soil becomes frozen, about 6 or 8 inches more of earth should be placed over the entire heap. By following up this gradual process of covering, all danger of heating will be obviated, and the roots will keep in perfect order. Sow from 5 to 8 pounds to the acre.

| MANGELWURZEL |  |  |  |
| :---: | :---: | :---: | :---: |
| 260 | Giant Yellow Intermediate. Very large. Io lbs. and over © 25 cts. per lb. . Per oz. | $\$ \mathrm{o}^{\mathrm{I} / \mathrm{lb}} \mathrm{Ib}_{5}$ | $\$ \mathrm{Lb} \quad{ }_{30}^{\mathrm{Lb}}$ |
| 26I | Golden Tankard Mangel-Wurzel. Bright yellow; handsome and sweet, and very productive. io lbs. and over (a) 25 cts . per lb. |  |  |
| 263 |  | 15 | 30 40 |
| 264 | Long Yellow. A good main crop sort. Io lbs. and over @ 25 cts . per lb. . . . Io | 15 | 30 |
| 267 | Mammoth Long Red Mangel-Wurzel. Very large, selected strain; enormously productive under careful culture. 10 lbs . and over @ 25 cts . per lb . | 15 | 30 |
| 268 | Red Globe Mangel-Wurzel. Similar to the Yellow Globe ; productíve. io lbs. and over @, 25 cts. per lb. | 15 | 30 |
| 269 | Yellow Globe Mangel-Wurzel. Large and productive ; keeps well, and is relished by stock. Io lbs. and over (a) 25 cts. per lb. | 15 | 30 |
| 27 | Yellow Ovoid Mangel-Wurzel. Of distinct shape; one of the most productive sorts. Io lbs. and over © 25 cts . per lb. | 15 | 30 |

## SUGAR BEETS

On application, we mail circular giving directions for their culture. We recommend 20 to 25 lbs . to the acre. Per oz. $\quad \mathrm{y} / \mathrm{lb}$. Lb .
74 QUEEN OF DENMARK. A new large, smooth variety, remarkably nutritious; by far the best for feeding stock. Io lbs. and over @ 35 cts . per lb. . . \$0 io \$0 20 \$0 40
280 White Rose-top. io lbs. and over @ 25 cts. per lb. . . . . . . . . . . . . . . . $10 \quad 1530$
282 White Green-top. Very large ; for feeding stock. io lbs. and over @ 25 c . per lb. . io 15

## BROCCOLI

## Broccoli Broculi Spargelfobl

Culture.-Sow early sorts as soon as the ground can be worked in the spring, in shallow drills, drawn 3 or 4 inches apart. Plant out 2 feet apart each way when the plants are about 4 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 ; they are excellent, and deserve much wider culture than is usual in this country.


## BORAGE

The young leaves of this annual, which smell somewhat like a cucumber, are used as a salad, or boiled like Spinach. Should be sown at intervals, as the leaves are palatable only when young. Sow in the spring, in light soil ; transplant in shallow drills, a foot apart, when of six weeks' growth. Pkt. 5 cts., oz. io cts., 1b. \$1.

## BRUSSELS SPROUTS

## Chou de Bruxelles Berza de Brusels Rojenfogl

Culture.-Sow in May, in the same manner as Cauliflower, and transplant in July, i foot apart in the rows, which should be $\mathrm{I}^{1 / 2}$ feet apart. In gardens, both large and small, the Brussels Sprouts is, 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 real sprout is not much larger than a marble, and as firm and hard almost as the stock itself. These are the sorts 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.


## BURNET

The leaves have a warm, piquant taste, and are useful for salads and soups. Sow early in the spring, half an inch deep, thinly in rows. Garden, pkt. 5 cts., oz. Io cts., 1/4 lb. 30 cts., lb. \$1.


THORBURN'S GITT-EDGE CACLIFLOWER

## CAULIFLOWER

## Chou-Fleur Coliflor $\mathfrak{B l u m e n f o g l}$

Culture.-The same as for Cabbage, except that extra manure and plenty of water will pay upon Caulifower. 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.
315 Extra-Early Dwarf Erfurt. The very best and earliest for forcing under Perpkt. Oz. 1/4b. Lb. glass; very dwarf and compact, with short stem and small leaves. It should not be confounded with entirely different sorts advertised : \$0 50 \$5 oo Thorburn Extra-Early Snowball. Our strain of this popular variety is unequaled. It is one of the best for forcing under glass or for open ground
Thorburn Large Early Snowball. A large strain of the above
Thorburn Gilt-Edge. Large, heavy sort, maturing immediately after our Large Snowball. It is, without any exception, the best and surest of all Large Early Dwarf Erfurt. Popular with market-gardeners for late crop .
Denmark. On the style of Large Erfurt ; very fine
Extra-Early Paris. Heads of medium size ; first-class
Lenormand Short Stem. Has very large heads; white and firm

| 25 | 2 | 25 | $\$ 7$ | 50 | $\$ 30$ | 00 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 25 | 2 | 25 | 7 | 50 | 30 | 00 |
|  |  |  |  |  |  |  |
| 25 | 2 | 25 | 7 | 50 | 30 | 00 |
| 25 | 2 | 25 | 7 | 50 | 30 | 00 |
| 10 | 1 | 75 | 6 | 50 | 24 | 00 |
| 10 |  | 60 | 1 | 75 | 6 | 00 |
| 10 |  | 60 | 1 | 75 | 6 | 00 |
| 10 |  | 60 | 1 | 75 | 6 | 00 |
| 05 | 40 | 1 | 25 | 4 | 00 |  |
| 05 |  | 40 | 1 | 25 | 4 | 00 |
| 10 | 60 | 1 | 75 | 6 | 00 |  |
| 05 |  | 40 | 1 | 25 | 4 | 00 |

Large Algiers. Market-gardeners' popular late sort for the South
Early London. Large and hardy
05
327
328
329
Walcheren. Very late, hardy variety
05
Thorburn Nonpareil. A first-class standard sort
05

Autumn Giant. Vigorous in growth, and very large ; late . . . . . . .


EARLY JERSEy WAKEFIELD CABBAGE

## CABBAGE

Chou Berza de repollo<br>תohl

CULTURE. - Soil for Cabbage should be rich and 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 coldframes, where they are wintered, taking care, in planting, to set the young plants down to the first leaves. Transplant in spring as soon as the ground can be worked, setting the plants 2 feet apart one way and from 12 to 18 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 Cabbage needs 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 2 by 3 feet, so as to work them with a horse and cultivator. To destroy the green worm that is so destructive to the leaves and heads of Cabbage and Cauliflower, an experienced grower says: "Take one ounce of saltpetre and dissolve it in 12 quarts of water; then take a short-handled whisk broom, dip it in the solution and sprinkle the plants well. One application is sufficient, unless the stuff is washed off by heavy rains. The liquid, being perfectly clear, never colors the Cauliflower or Cabbage heads." To prevent the turnip flea attacking the young plants, sift fine air-slaked lime or tobacco dust over them, as soon as they appear above ground.

| 35 | Early Spring. Flat, extra-early, medium size . . . . . . . . . . . . $\$ \mathrm{O}$ O5 0 \% | $\$ \mathrm{Oz}_{0}^{\mathrm{Oz}}$ | $\begin{gathered} \text { x/1b. } \\ \$ 060 \end{gathered}$ | $\$ 2 \mathrm{Lb} .$ |
| :---: | :---: | :---: | :---: | :---: |
| 356 | Early York. The standard English sort . . . . . . . . . . . . . . . 05 | 15 | * 50 | I 50 |
| 357 | Large Early York. Larger than the above . . . . . . . . . . . . . . . 05 | 15 | 50 | 50 |
| 358 | Express. Extra-early ; small, solid heads of fine quality . . . . . . . 05 | 20 | 60 | \% |
| 359 | Etampes. A fine, extra-early small French sort, with pointed heads . . 05 | 20 | 60 | 2 oo |
| 361 | Early Jersey Wakefield. The most popular early variety ; heads very solid, pyramidal shape, with little outside foliage | 25 | 75 | 50 |
| 36 | Extra-Early Jersey Wakefield. A somewhat earlier selection of our celebrated standard strain described above. | 25 | 75 | 50 |
| 364 | Charleston Wakefield. Very large strain of the above . . . . . . . . . . 05 | 25 | 75 | 50 |
| 365 | Early Winnigstadt. A standard second-early variety ; very hard heads . 05 | 15 | 50 | 50 |
| 366 | All Head. Very solid, early sure-heading large strain . . . . . . . . . 05 | 25 | 5 |  |
| 367 | Early Flat Dutch. Valuable for forcing, or for general crop . . . . . . o5 | 20 | o |  |
| 368 | Filderkraut, or Pomeranian. Pointed head . . . . . . . . . . . . . . 05 | 20 | 60 | 2 оо |
| 369 | Improved Early Summer. A superior second-early sort ; produces large and solid heads of the finest quality; very popular in the South | 20 | 60 | 200 |
| 372 | Selected All-Seasons. One of the finest for second-early or late, growing to a large size quickly and surely | 20 | 60 | 200 |
| 373 | Succession Improved. An excellent second-early sort, producing large, solid heads | 25 | 75 | 250 |
| 374 | Surehead. Large, solid heads of fine quality . . . . . . . . . . . . . 05 | 20 | 60 |  |
| 377 | Large Late Drumhead. A standard winter Cabbage for main crop . . . . $0_{5}$ | 20 | 60 | 75 |
| 379 | Large Late Flat Dutch. Also a valuable main-crop sort for market . . . 05 | 20 | \% | , |
| 381 | Thorburn Market-Gardener's Private Stock Flat Dutch. Fine strain of the immense winter Cabbage grown on Long Island for Market | 25 | 75 | 250 |



CABBAGE, continued


## CARDOON

Cardoon Cardo Garbon
Culture.- Sow early in spring, ify ras yhere they are to stand, and thin them to ifoot apart. When full size, bind the plants together with bast or raffa, andearthup like Celery to blanch. The stems of the leaves are used for salads, soups and stews.


## CARROTS

Carotte Zanahoria Möhren

Culture.-Sow No. 450 and 452 as early as the ground can be worked; or, for late crop, until the latter part of July or early in August for a winter crop. For main crop, sow from middle of May to the first of July. Thin out early crop to 5 inches in the row, main crop 6 to 7 inches; the rows io inches apart for early crop, I4 for
 main crop. Hoe often and deeply between the rows. Soil light, sandy loam, richly manured and deeply dug. Sow at the rate of 2 lbs . to the acre.
$45^{\circ}$

Early Round Parisian. Small and very tender; for frames or open ground. Pkt. 5 cts., oz. 15 cts , $1 / 4 \mathrm{lb} .30 \mathrm{cts} ., \mathrm{lb} . \$ \mathrm{I}$.
Early Forcing. Tender and fine ; best for early and late crops and frames. Pkt. 5 cts., oz. I 5 cts., $1 / 4 \mathrm{lb}$. 30 cts., lb. $\$ 1$.
6 Half Short Oxheart (Guerande). Very thick and short. Pkt. 5 cts., oz. 10 cts., $1 / 4 \mathrm{lb} .25 \mathrm{cts} ., \mathrm{lb} .90 \mathrm{cts}$.
Early Scarlet Horn. Very thick roots; fine for frames. Pkt. 5 cts., oz. Io cts., 1/4 lb. 25 cts., lb. 90 cis.
Half Long Pointed. A well-known strain; productive. Pkt. 5 cts., oz. Io cts., $1 / 4 \mathrm{lb} .25 \mathrm{cts} ., 1 \mathrm{~b} .90 \mathrm{cts}$.
Half Long Stump-rooted. An excellent sort, of good quality. Pkt. 5 cts., oz. Io cts., 1/4 lb. 25 cts., lb. 80 cts.
Half Long Stump-rooted, Nantes Strain. Very popular. Pkt. 5 cts., Oz. Io cts., $1 / 4$ lb. 25 cts., lb. 90 cts.
Half Long Stump, Chantenay. Style of Nantes, broader shoulder. Pkt. 5 cts ., oz. 1o cts., $1 / 4 \mathrm{lb} .25 \mathrm{cts}$, 1 lb .90 cts .
Carentan. Half long stump-rooted; coreless, red flesh. Pkt. 5 cts., oz. 1o cts., 1/4 lb. 25 cts., lb. 90 cts.
Half Long Stump-rooted, Luc. Useful main-crop sort. Pkt. 5 cts., oz. 10 cts., $1 / 4 \mathrm{lb} .25$ cts., lb. 90 cts
Half Long Danvers. Large; of good quality and exceedingly productive ; one of the most popular sorts. Pkt. 5 cts ., oz. Io cts., $1 / 4 \mathrm{lb} .25 \mathrm{cts} ., \mathrm{lb} .75 \mathrm{cts}$.
8 St. Valery. A thick, intermediate long red. Pkt. 5 cts., oz. 1o cts., $1 / 4 \mathrm{lb} .25 \mathrm{cts} ., \mathrm{lb} .75 \mathrm{cts}$.
Long Orange. Best for stock-feeding. Pkt. $5 \mathrm{cts} ., \mathrm{oz}$. io cts., 1/4 lb. 25 cts., lb. 75 cts.
White Vosges. Large, thick, short ; fine for stock. Pkt. 5 cts., oz. 1o cts., $1 / 4 \mathrm{lb} .20 \mathrm{cts}$. , lb. 50 cts.
Long White. Very large; for stock. Pkt. 5 cts., oz. io cts., 1/4 lb. 20 cts., lb. 50 cts.
Short White. Good sort for stock. Pkt. 5 cts., oz. Io cts., $1 / 4 \mathrm{lb}$. 20 cts . lb .50 cts .

## CELERY

Celeri Apios Sellerie
Culture. - Sow the seed in a light, rich, dry border, as early as the ground can be worked, in drills 8 or ro 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 6 or 8 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 must be set in a single row in a narrow trench, or the trench may be made into a bed wide 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 I foot apart, and the plants about 8 inches apart in the rows. The bed should be made very rich with thoroughly decomposed manure. The plants will need to be earthed up two or three times, and in doing this, care should be taken not to let the earth get into the heart of the plant. In field culture, the plants are set on the surface in rows 4 feet apart when the Celery is to be earthed up in the field for early use, and 2 feet apart when the plants are to be taken up and blanched in the cellar for winter use. The plants are set 6 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, I foot wide, and at a depth of a few


GOLDEN SELF-BLANCHING CELERY inches less than the height of the Celery. The plants are then lifted and set close together. When severe cold weather comes on, cover gradually with leaves, hay or strav, and place boards on top. The turnip-rooted or "Knob" Celery needs no earthing up, and may be planted in rows I foot apart.
520 Thorburn Fin de Siecle. We consider this the largest, hairdiest, solidest, Per pkt. Oz. 1/4b. Lb. crispest, best keeping and best shipping winter Celery we know of \$0 Io $\$ 025 \quad \$ 075 \quad \$ 250$
524 Improved White Plume. Naturally white or light foliage ; requires but little $\begin{array}{lllllll}\text { banking up to blanch; very early and extensively grown for market } & 05 & 20 & 60 & 2 & 00\end{array}$

Golden Self-blanching, American-Grown. Large, golden yellow

## French-Grown

Thorburn's Gilt-Edge. Our finest strain
Rose-ribbed Golden Self-blanching. Very handsome rose-striped ribs
10
Io
10
IO IO
IO $\begin{array}{llll}05 & 20 & 60 & 2000\end{array}$ either for family or market-garden. The heart is golden yellow
Thorburn's Schumacher. Immense size ; solid and crisp; firm, golden yellow heart ; a fine keeper; highly recommended
$\begin{array}{llll}10 & 25 & 75 & 2\end{array}$
532 Perle le Grand. A highly recommended new variety. Full golden heart, and rich flavor, and an excellent keeper
533 Giant Pascal. An easily blanched and fine-keeping large late sort
$5: 5$ Large-ribbed Kalamazoo. A good, half-dwarf, white, solid Celery
5:7 Evans' Triumph. Fine, large, solid green variety
535 Giant Golden Heart. Very large, solid, and fine-flavored; of vigorous growth
539 Crawford Half Dwarf, or Golden Heart. Of vigorous growth, fine flavor . .
540 Winter Queen. Very large, solid green winter sort ; blanches well
541 Snow White. Blanches very white
$5+4$ Sandringham Dwarf White. Small, white, solid; for soup greens
545 Cooper Cutting. For soup greens
. 05
05
${ }^{05}$
$\begin{array}{r}05 \\ 05 \\ \hline\end{array}$

546 Pink Plume. Same as White Plume, except that the stalks are tinged with pink. It is of very attractive appearance, rich flavor and long-keeping. New Rose. Fine flavor; very handsome
551 CELERIAC, or Turnip-rooted Celery, Erfurt. For soups and stews ....
552 Celeriac, Thorburn Giant. Best of the class; very large roots, used for soups and stews. Roots, when cooked and sliced, make fine winter salad .

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| 20 |  | 60 |  |  |
| 25 |  | 75 |  |  |



CROSBY SWEET CORN

## CORN, SWEET or SUGAR

ne We supply packets of Sweet Corn at Io cts. each, postpaid.
Culture.-Plant in hills three feet apart each way, and five or six kernels in a hill. Hoe often and draw soil up to the stem ; 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.

## EXTRA-EARLY

580 Early Cory. A very early variety, with good-sized ears
58 I White Cory. Resembles the ordinary Cory, but with white cob
582 Metropolitan. Large, handsome ears of fine quality ; very early

| Per ear | $\begin{aligned} & \text { Per } \\ & \text { qt. } \end{aligned}$ | $\begin{gathered} \text { Per } \\ 1 / 2 \mathrm{pk} . \end{gathered}$ | $\begin{aligned} & \text { Per } \\ & \text { pl. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { bus. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| \$0 05 | \$0 25 | \$0 75 | \$1 25 | \$4 $5^{\circ}$ |
| 05 | 25 | 75 | 125 | 450 |
| -5 | 30 | I 00 | I 50 | 5 co |
| . 05 | 35 | I 25 | 225 |  |
| . | 30 | I 00 | 150 | 550 |
|  | 30 | I 00 | I 50 | 450 |
|  | 25 | 75 | I 25 | 4 оэ |
| O5 | 25 | 75 | I 25 | 450 |
| O5 | 30 | I 00 | 150 | 5 oo |
|  | 20 | 60 | I 00 | 325 |
|  | 30 | I oo | 150 | 5 on |

## SECOND-EARLY, or INTERMEDIATE

595 Early Champion. Very large ears, considering its earliness . . . o5
596 Shaker. Very large, white grain; quite early
598 Early Mammoth. Very large ears, fine quality ; not very late . . o5
599 Crosby. Matures after Minnesota; fair-sized ears of good quality . o5
6oo Potter Excelsior. Good size, and a week earlier than Large Excelsior o5
601 Moore Concord. Of strong growth ; ears large and well filled . . . 05
602 Early Evergreen. A week earlier than Stowell Evergreen . . . . o5
603 Early Adams. Not a Sugar Corn, but grown extensively for market5

## GENERAL CROP

604 Large Eight-rowed. Very productive and of superior richness
608 Triumph. Large ear, very white ; productive . . . . . . . . . . o5
610 Hickox Improved. Handsome ears, very white and of rich flavor . 05
612 Stowell Evergreen. Ont of the most popular varieties . . . . . . 05
613 White Evergreen. A new strain of Evergreen with pure white grain. o5

| 25 | 75 | I | 25 | 4 | 50 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 25 | 75 | I | 25 | 4 | 50 |
| 25 | 75 | I | 25 | 4 | 50 |
| 25 | 75 | I | 25 | 4 | 50 |
| 25 | 75 | I | 25 | 4 | 50 |
| 25 | 75 | I | 25 | 4 | 50 |
| 25 | 75 | I | 25 | 4 | 50 |
| 20 | 60 | I | co | 3 | 00 |

## SWEET CORN, continued

| TE VARIETIES Per | $\begin{aligned} & \text { Per } \\ & \text { 4t. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & 1 / 2 \mathrm{pk} . \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { pk. } \end{aligned}$ | Jet bus. |
| :---: | :---: | :---: | :---: | :---: |
| superior flasor; grains black .\$0 05 |  | \$100 | 150 | $\$ 500$ |
| 1, but one of the sweetest sorts . o5 | 30 | 100 | 150 | 5 co |
| ; large ears, rich and sweet . . 05 | 30 | 00 | 50 | 450 |
| quality; largely used for canning. of | 30 | 100 |  | 450 |
| Plus Ultra, but with large ears . 05 | 30 | 100 | I 50 | 500 |

## CHERVIL

## Cerfeull Perifollo Benjenlaud

Collure.-Cultivate and use the curled variety of Chervil like parsley. Sow at any time in the spring, in shallow drills, I foot apart, in well-prepared ground. The seed of the Tuberous Chervil should be sown in August or September, and treated like the carrot.

Peroz. 1/2lb. Lb.
630 Curled. Leaves used for flavoring soups and stews, and for garnishing . . . . \$ 10 \$0 30 \$1 00
6.3i Plain. Like above, but not curled
10

632 Tuberous. A variety which has edible roots . . . . . . . . . . . . . . 15.50

## CHICORY

Perpkt. Oz. 1/4 lb. Lb.
634 Commen 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 05 \$0 1o \$0 30 \$100 635 Witloof. May be sown in May and June in drills. Transplanted or thinned to 6 inches, treat as Endive, except that in the latter part of summer or fall it should be gradually banked up like Celery. The stalks, when blanched, make a delicious salad. It is also used by the French $\begin{array}{llllll}\text { as a boiled vegetable, dressed in the same manner as Cauliflower } & 05 & 15 & 40 & 1 & 25\end{array}$
636 Large-rooted Magdeburg. Roots are the Chicory of commerce

| 05 | I5 | 40 | I | 25 |
| :--- | :--- | :--- | :--- | :--- |
| 05 | I5 | 30 | I | OJ |

## COLLARDS

Cutcref.-Sow seed, as for cabbage, in June, July and August, for succession. Transplant when a month old, in rows a foot apart each way, and hoe often. Georgia. Pkt. $5 \mathrm{cts} ., \mathrm{oz}$. io cts., 1b. 75 cts .

## CORN SALAD, or FETTICUS

## Mache Macha o I'alerianilla Etechialat

Colture.-Sow during August, or early in September, in drills 1/ inch deep and 6 inches apart. If the weather is dry when the seed is sown, tread it lightly to insure germination. Keep down weeds with hoe. Just before the winter, cover thinly with straw or leaves.

| Per pkt. | Oz. | 1/1b. | Lb |
| :---: | :---: | :---: | :---: |
| . \$0 O5 | \$0 10 | \$0 20 | \$0 50 |
| O5 | 10 | 20 | 50 |
| 05 | Io | 25 | 75 |
| 05 | 10 | 25 | 85 |

## CRESS

## Cresson Berroo Mastuerzo Srefie

Culture. - Sow Nos. 645 and 646 thickly, in shallow drills, every two or three weeks. No. 645 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. 648 and 649 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 hotbeds. 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.


## DANDELION <br> Pissenlit Amargon Barbeblum

Ccleture. - The Dandelion is a hardy perennial plant, and one of the most desirable early spring salads. Sow in early spring, in drills $1 / 2$ inch deep and 18 inches apart; thin out the plants to 12 inches. Keep clear of weeds during the summer, and the ensuing spring the leaves will be fit to cut. They are best, however, when hlanched, 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 the rows thus : $\wedge$ This excludes the light and improves the greens, rendering them far superior to those found growing wild in the grass without cultivation, which are almost sure to be bitter.



## CUCUMBER

Concombre<br>Pepino<br>Gurfe

Culture.-For very early, sow seeds in hotbeds 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 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 4 feet apart, putting a shovelful of well-rotted manure in each hill.
664 Cumberland. The best pickling sort yet introduced, being very handsome and productive, with flesh firm but very crisp and tender . . \$0 o5
665 Early Green Cluster. Fruit small and in clusters; very prolific . . . . . o5
666 Early Russian. Very early ; short; fine for pickles . . . . . . . . . . . o5
667 Giant Pera. Very long; one of the best for table use :....... o5
668 Fordhook Pickling. Very prolific ; medium size; fine pickling strain .. o ${ }_{5}$
${ }^{\circ} 5$
\$0 10 \$0 $30 \$ 090$
$\begin{array}{ll}668 & \text { Fordhook Pickling. Very prolific ; medium size; fine pickling strain } \\ 669 \text { Thorburn Everbearing. Small-sized; very early and enormously produc- }\end{array}$ tive, and valuable as a green pickler .
670 Cool and Crisp. Extra-early and very prolific; long, straight, slender and very dark green; good either for pickling or slicing
671 Early Short Green. Good for pickling; productive
671 Early Short Green. Good for pickling ; productive . . . . . . . . . . 05
672 Long Parisian. Long, green, cylindrical, firm and crisp .......... o5
$15 \quad 30 \quad 1 \quad 00$

673 New Orleans Market. For forcing or open ground; very productive; good keeper and shipper
$\begin{array}{lllll}05 & 15 & 30 & 1 & \text { оо }\end{array}$
674 White Spine Improved. A very handsome and uniform early variety. It is very productive, crisp and of fine flavor
05 1о $30 \quad 90$

675 " " Arlington. A fine strain of the Improved White Spine. It

679 Long Green Turkey. Fruit very long and rather slim . . . . . . . . . 05
680 Green Prolific Pickling. One of the best for pickling; dark green . . . . 05
681 Nichol Medium Green. Most symmetrical, and a very fine table sort . . . 05
682 The Princess. Smooth, light green, very solid and extremely prolific . . o5
683 Tailby Hybrid. Very long, and superior for table use . . . . . . . . . 05
684 Small Gherkin. Very small bur ; used for pickles . . . . . . . . . . . o5
685 Japan Climbing. Good for frames or open ground . . . . . . . . . . . ${ }^{5}$

## ENGLISH CUCUMBERS FOR FRAMES

## (Concombre espèces Anglaises pour Couches)

[^0]
## ENDIVE, or CHICORY

Chicoree Escarola o Endizía Enbinie

Culture.-Sow in June, July and August ; cover lightly; when up, thin out to 8 inches apart, and water well afterward, if dry. When the leaves are 6 or 8 inches long, blanch by gathering in the hand and tying together near the top with yarn or bast. This must be done when quite dry, or they will rot. At the approach of winter, take up carefully, with a ball of earth to each plant, and place close together in frame or cellar for use. They must be kept dry and have plenty of air, or they will rot.

|  | Green Curled Winter. Standard sort for fall and winter crop | $\begin{aligned} & \text { Per pkt. } \\ & . \\ & \$ 0 \end{aligned}$ | $\$ 0 \text { I }$ | \$0 40 | \$125 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | White Curled. For early use | 05 | 20 | 60 | 200 |
|  | Large Green Curled (de Ruffec). Broad ribs ; fine for fall and winter | 05 | 20 | 60 | 20 |
|  | Queen of Winter. Broad-leaved. Very large, slightly laciniated; sta frost better than any other | ${ }^{\circ} 5$ | 25 | 75 | 250 |
|  | Broad-leaved (Escarolle). A sweet variety ; fall and winter | 05 | 15 | 40 |  |

## EGGPLANT

## Aubergine Berengena Eierpflanje

Culture.-Sow in hotbeds very early in spring and transplant when 2 inches high into a second bed or into small pots. If this is not done, thin to 4 inches apart. Do not plant out until weather has become 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. Set out plants 3 feet by 2 .
740 Improved New York Spineless. The standard, largest and best ; large, oval, deep purple; early and productive. Pkt. io cts., oz. 35 cts., $1 / 4 \mathrm{lb}$. $\$ \mathrm{I}, \mathrm{lb} . \$ 3.5 \mathrm{o}$.
741 Black Beauty. As large as the New York Improved and about ten days earlier; very rich purplish black color. Pkt. Io cts., oz. 45 cts., $1 / 4 \mathrm{lb} . \$ 1.25, \mathrm{lb} . \$ 4.50$.
742 Early Dwarf Purple. Dwarf, very early ; small ovoid fruit. Pkt. 5 cts., oz. $35 \mathrm{cts} ., 1 / 4 \mathrm{lb}$. $\$ \mathrm{I}, \mathrm{lb} . \$ 3.50$.
743 Long Purple. Of distinct shape and fine quality. Pkt. 5 cts., oz. 20 cts., $1 / 4 \mathrm{lb} .60 \mathrm{cts} ., 1 \mathrm{~b} . \$ 2$.
744 Black Pekin. Round, blackish purple fruit; has dark foliage. Pkt. 5 cts., oz. 30 cts., $/ 4 \mathrm{lb}$. 85 cts., lb. $\$ 3$.
746 Scarlet Chinese. Small and ornamental. Pkt. 5 cts., oz. 30 cts , $1 / 4 \mathrm{lb} .85 \mathrm{cts} ., \mathrm{lb} . \$ 3$.
747 Round White. Small and ornamental. Pkt. 5 cts., oz. 30 cts., $1 / 41 \mathrm{lb} .85 \mathrm{cts} ., \mathrm{lb} . \$ 3$.
748 Long White. Small and ornamental. Pkt. 5 cts., oz. $30 \mathrm{cts} ., 1 / 4 \mathrm{lb} .85 \mathrm{cts} ., \mathrm{lb} . \$ 3$.
749 Striped. Purple and white. Pkt. 5 cts., oz. $30 \mathrm{cts} ., 1 / 4 \mathrm{lb} .85 \mathrm{cts} ., \mathrm{lb} . \$ 3$.
750 Black Snake. Cylindrical almost black fruits 12 inches long. Pkt. io cts., oz. $50 \mathrm{cts} ., 1 / 4 \mathrm{lb}$. $\$ 1.25$.


NEW YORK IMPROVED PURPLE EGGPLANT

## FENNEL, FLORENCE or NAPLES

## Fenolil de Florence Finocchio di Napoli

CULTURE.-Sow in spring, in rows 16 to 20 inches apart. Thin out so as to have the seedlings 5 or 6 inches apart, and water as plentifully as possible. The plant is usually eaten boiled. In flavor it resembles celery, but with a sweet taste and a more delicate odor. $755 \mathrm{Pkt} .5 \mathrm{cts} ., \mathrm{oz}$. I $5 \mathrm{cts} ., 1 / 4 \mathrm{lb} .40 \mathrm{cts} ., \mathrm{lb} . \$ 1.25$.

## ICE-PLANT

Culture.- Sow in good garden soil as soon as the ground becomes warm in spring, in shallow drills if foot apart. Thrives well in hot, dry climates. Pkt. 5 cts., oz. 40 cts.

[^1]
# KALE, or BORECOLE 

Chou vert Frise Col תramêfoht

Culture.-Nos. 760 to 765 are cultivated and grown exactly like cabbage. No. 766 sow in August and September for early greens. Sow 770 early in the spring in a hotbed, and when from 1 to 2 inches high transplant into a bed or border that has been highly manured and deeply dug. Sea Kale is not fit to eat until it has been blanched, either under large pots, or by banking up with sand.
60 Curled Dwarf Green Scotch. Very dwarf and spreading; best Perpkt. Oz. 1/4b. Lb.
Curled Dwarf Green Scotch. Very dwarf and spreading ; best strain;
largely grown in the South, being sown in Alrgust and
September . . . . . . . . . . . . . . . . . . . . . . . $\$ 005 \$ 0$ 10 $\$ 020 \$ 060$
761 Emerald Isle. Beautifully curled leaves of the richest possible
emerald green ; the handsomest Kale we have ever seen . . . o5 io 30 I oo
-62 " Tall Green Scotch. A taller growth of the above . . . . . . . . o5
763 " Dwarf Brown. Very hardy . . . . . . . . . . . . . . . . . 05
764 " Tall Brown. Very hardy . . . . . . . . . . . . . . . . . . . 05
765 " Striped and Variegated. For garnishing . . . . . . . . . . . 05
766 " Siberian, Thorburn Improved. Uniformly dwarf, green curled ; hardy $0_{5}$
770 Sea Kale. Very fine; resembles celery . . . . . . . . . . . . . . . . 10
772 Pe-tsai. (The Chinese Cabbage.) Grows like Cos Lettuce . . . . . . o5
773 Jersey Winter Kale, or Cow Cabbage. For feeding cattle . . . . . . . . . 05

| 10 | 25 |  | 75 |
| :--- | :--- | :--- | :--- |
| 10 | 30 | I 00 |  |
| 10 | 35 | I | 25 |
| 15 | 60 | 200 |  |
| 20 | 60 |  |  |
| 10 | 20 | 40 |  |
| 25 | 75 | 2 | 50 |
| 20 | 60 | 2 | 00 |
| 10 | 20 |  | 50 |

## KOHLRABI

## Chou-Raye Colinabo Sioblrabi

Culture.-This is an excellent vegetable, and should be grown in every garden. Sow in spring, in rows 18 inches apart, afterward thinning the plants to 8 or 10 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 stems above ground are 2 or 3 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, with a fine and delicate flavor.

780 Early White Vienna. Handsome and delicate ; white ball. Pkt. 5 cts., oz. 20 cts., $1 / 4 / 4 \mathrm{lb} .60 \mathrm{cts} ., \mathrm{lb} . \$ 2$.
782 Early White Vienna. For frames. Pkt. 10 cts., oz. 30 cts., $1 / 4 \mathrm{lb} .85 \mathrm{cts} .$, lb. \$3.
783 Early Purple Vienna. Purple ball; a very good sort. Pkt. 5 cts., oz. 20 cts., $1 / 4 \mathrm{lb} .60$ cts., lb. $\$ 2$.
785 Early Purple Vienna. For frames. Pkt. io cts., oz. 30 cts., 1/4 1 b . $\mathrm{S}_{5}$ cts., lb. \$3.
786 Large White, or Green. Forms a large ball; not so fine, but more productive. Pkt. 5 cts., oz. I5 cts., 1/4b. 35 cts., lb. \$r.

## LEEK

## Poireau Puerro Forro

Culture.-Sow very early in the spring in drills 6 inches apart and I inch deep. Thin out to $I$ inch. When about 7 inches high, transplant them in rows 12 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 seeds may also be sown in September, and the young plants transplanted in spring to where they are to remain.
kohlrabi


THORBURN'S MAXIMUM LETTUCE

## LETTUCE

Laitie Lechuga Salat
Culture.-Sow Nos. 8o9, $822,835,848$ and 849 in hotbeds in March, and in the open ground as soon as it car be worked, and transplant to rows 8 inches apart. Sow in two weeks' time same varieties again, as also Cos, for a succession. In August sow any of the varieties. 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 6 or 8 inches apart. To have Cos in good order they must be sown in a hotbed early in the year, and transplanted to a coldframe, 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, enriched with thoroughly rotted manure and well pulverized. The after culture should be close and careful, to secure the best results.
(1)w. s. stands for white-seeded; b. s. for black-seeded

Perpkt. Oz.
1/2lb. L.b.
SoS American Gathering. Twisted and curled leaves; fine for early or late sowing. w. s. . . . . . . . . . . . . . . . . . . . . . . . . $\$ 05$
$\$ 015$
So9 Big Boston. Fine for forcing in coldframes or for open ground. w. s. . . 05
Sio California Cream Butter. Very large, solid heads; inside very white. b. s. 05
$\begin{array}{llll}\$ 0 & 30 & \$ 1 & 00 \\ 35 & 1 & 25 \\ 35 & 1 & 25\end{array}$
Si2 Coldframe White Cabbage. For starting in coldframes and setting out early. w. s. . . . . . . . . . . . . . . . . . . . . . . . . . . 05
SI5 Continuity. The longest standing of all ; fine heading sort. b. s. . . . . o5
820 Deacon. Large, solid summer cabbage variety. w. s. . . . . . . . . . o5
821 Denver Market Very curly heads; good for forcing or outdoors. w. s. . o5
S22 Emperor Forcing Improved. Yellow, earliest of all; only for frames. a'. s. ( 5
S23 Emperor William. Light yellow, solid head, with brownish spots. Very tender ; stands heat well. b. s.

05
S24 Giant Crystal Head. A splendid new cabbage Lettuce, very large, solid; outside leaves bright green, inside crystal white with yellow heart, fine flavor; crisp and tender. w. s.

05
S25 Glass House, Thorburn. For forcing under glass. iu.s...... . . . . . . .
$825 a$ Golden Stonehead. Handsome, small, solid head I.ettuce for forcing. a's. s. 05
826 Golden Queen Forcer. Medium size, golden yellow, solid heads; early: a's. s. 05
827 Grand Rapids Forcing. Large, tender ; one of the best for forcing. b. s. . 05
828 Gray-seeded Butter. One of the best ; large head. b. s. . . . . . . . 05
829 Hammersmith Hardy Green. w. s. . . . . . . . . . . . . . 05
830 Hanson Improved. Very large and solid; withstands the hot sum well. w. s. o5
83 I Hubbard Market. A large cabbage variety ; for forcing or open ground. w.s. of

| LETTUCE, continued |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 832 | Iceberg. Large, solid heads, very handsome; tender and crisp. w. s. \$0 05 |  |  |  |
| 8 | Large Boston Market. Very large, solid heads ; fine for forcing. \%\%.s. . 05 |  |  |  |
| 834 | Mammoth Black-seeded Butter, Thorburn. A selected strain, with large, solid yellow heads. The favorite variety of New York market- o ardeners |  |  |  |
| 835 Market-Gardeners' Private Stock, Thorburn. A selected strain; solid, large |  |  |  |  |
|  | heads, resisting the sun for a long time before shooting up. b. s. . . 05 | 15 | 35 |  |
| 837 | Maximum, Thorburn. The largest, solidest, crisp | 15 | 35 |  |
| 838 | May King. Extra-large, round, solid heads, light green outside, with clear yellow heart ; very tender and of fine flavor . . . . . . . . . . . . ro | 40 |  |  |
| 840 | Mignonette. Distinct russet-colored ; very solid and compact. w. s. . . o5 |  | 50 |  |
| 541 | New York Cabbage. Large, solid heads ; inside very white. w. s. . . . o5 | 15 | 35 |  |
| 842 | Oak Leaf. w. s. . . . . . . . . . . . . . . . . . . . . . . . . o5 |  |  |  |
| 844 | Reichner. Large, white solid heads; good for forcing or outside. w. s. . 05 | 15 | 35 |  |
| 845 | Salamander Improved. Fine, compact heads ; resists summer heat. b. s. o5 |  |  |  |
| 847 | Shotwell Brown Head. Large, handsome, tender heads ; very hardy. b. s. o5 |  |  |  |
| 848 | Simpson Early Curled. A leading early sort ; very tender. w. s. . . . . o5 |  |  |  |
| 849 | Simpson Black Seed. A superior variety ; large, and of light color. b. s. o5 | 15 |  |  |
| 850 | Tennisball White Seed. A well-known forcing variety. w. s. . . . . . . 05 | 15 |  |  |
| 852 | Tennisball Black Seed. Forms close, hard heads ; for forcing; b. s. . . . o5 | 15 |  |  |
| 853 | Trocadero. Hardy ; for spring or summer ; green tinged russet. w. s. . o5 | 20 | 50 |  |
| 854 | Unrivaled. An improved Big Boston ; fine for forcing. w. s. . . . . . 05 | 15 |  |  |
| 855 | White Summer Cabbage. Close heads of good size ; fine for summer. w. s. o5 | 15 | 30 |  |
| 856 | Yellow Winter, Thorburn. The finest of all coldframe sorts. w. s. . . . 05 | 20 | 50 |  |
| 857 | Cos, Trianon Self-closing, or Romaine. Resists heat well. w. s. . . . . . o5 | 15 | 35 |  |
| S5 | Cos, Express. A fine, new, very dwarf sort requiring no tying up. w. s. o5 | 15 |  |  |

## MUSTARD

## Moutarde Mostaza Senf

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

870 Black. These seeds form the mustard of commerce . . . . . . . . . . \$0 o5 $\$ 005$ \$0 $10 \quad \$ 025$
87I White London. Leaves used for salads while young ; grows very rapidly . o5
S73 Giant Southern Curled. Very large leaves O5
874 Chinese broad-leaved. Leaves of agreeable flavor when cooked like Spinach o5
$\begin{array}{ll}10 & 20 \\ \end{array}$
25
60

## MELON, MUSK

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 4 to 6 feet apart each way, 6 to 12 seeds to a hill. When up, and all danger of insects has passed, pull out all but 3 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 young plants when the dew is on, to prevent the attacks of insects. A few hills for early use may be had by sowing in hotbeds, on pieces of sod or in pots. The seed 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.

|  |  | Oz. | 1/4b. |  |
| :---: | :---: | :---: | :---: | :---: |
| 880 |  | \$0 30 | \$0 85 | \$300 |
| 881 | Baltimore Market. Oblong ; orange flesh, of fine quality ; intermediate. o5 | 15 | 40 |  |
| 882 | Bay View Hybrid. Prolific, and of great size, oblong ; green flesh ; late. o5 | 20 | 50 | 150 |
| 883 | Champion Market. Large, slightly elongated, netted; flesh light green; early o5 | 20 | 60 |  |
| 884 | Cosmopolitan. Round, densely netted; green flesh; very sweet . . . . . o5 | 15 | 30 | 1 oo |
| 885 | Banquet. Beautifully netted, medium size, rich salmon flesh, fine quality . 1о | 30 | 85 | 3 оo |
| 887 | Emerald Gem. Small extra-early: dark green skin, orange flesh; very sweet o5 | 25 | 75 |  |
| 889 | Hackensack. Large, round and of good quality ; a popular variety ; early. o5 | 15 | 35 | 125 |
| 890 | Hackensack, Extra-Early. Ripens io days earlier than the Hackensack . o5 |  |  |  |
| 891 | Jenny Lind. Small, green-fleshed; very early; good quality . . . . . . . o5 | 15 | 35 |  |
| 893 | Long Island Beauty. On style of Hackensack. The earliest and finest in quality, and the most beautiful of all Musk Melons . | 20 | 60 |  |
| 894 Melrose. Oval, dark green, densely netted; flesh thick, |  |  |  |  |
| 896 | Montreal Green. Large, round netted ; flesh thick and light green; late . os | 20 | 5 |  |
| 897 | Netted Gem, Round. Very early; small and of fine flavor; green flesh . . 05 | ı | 25 |  |
| 898 | Netted Gem, Oblong. Same as above, save in shape . . . . . . . . . . . ${ }_{5}$ | ıо | 25 |  |
| 899 | Newport. Extra-early, small, round ; green flesh of fine flavor . . . . . o5 | 15 |  | 125 |
| 900 | Mango Melon, or "Vine Orange." Size, shape and color of an orange; fine for preserving or pickling . | 15 | 40 | 25 |
| 90 | Nutmeg. Sweet, green flesh, very early; named from its shape . . . . . o5 | ıo | 30 |  |
|  | Parisian. Full, red flesh of the finest quality; rind very thin, green, spotted white ; slightly oblong shape | 40 |  | 400 |
|  | Osage. Cocoanut-shaped; yellow | 15 | 30 |  |


|  | MELON, MUSK, continued |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 903a | Orange Christina. Round, very sweet and very early ; orange flesh . . \$o or pkt. | $\$ 0 \begin{gathered} 0 z \\ \$ 0 \end{gathered}$ | $\left\{0^{1 / 1 \mathrm{lb}} 60^{2}\right.$ | $\$ 20$ |
| 904 | Paul Rose. Handsome, oval, new variety; rich orange flesh, very sweet . $0_{5}$ | 15 | 30 | (x) |
| 905 | Pomegranate. Ornamental ; for perfume; late . . . . . . . . . . . . 05 | $2{ }^{\prime \prime}$ | $5^{\circ}$ | 50 |
| 907 | Red-fleshed Lyons. Orange flesh of the finest quality . . . . . . . . . 05 | 20 | 50 | 50 |
| 909 | Rocky Ford. Improved Netted Gem; very sweet and fine flavored; oblcng. 05 | 10 | 25 | So |
| 910 | New Giant. Round, light green; flesh deep salmon; very late . . . . . o5 | 15 | 35 |  |
| 912 | Surprise. Oblong; rich orange flesh of fine quality ; early . . . . . . . o5 | 15 | 40 | 25 |
| 913 | White Japan. Early, with light green flesh and white skin ...... 05 | 15 | 30 | 0 |
| 915 | Winter Pineapple. An extraordinary melon, which can be kept in splendid condition for months after being pulled. Suitable for the South only . 05 | 20 | 50 | 105 |

## IMPORTED VARIETIES OF MUSK MELONS

ENGLISH FRAME SORTS

920 Royal Favorite, Fine, white, thick flesh; a most valuable Pkt. new sort . . . . . . . . . . $\$ 025$
921 Invincible Scarlet . . . . . . . . 25
923 Munroe's Little Heath . . . . . . 25
925 Blenheim Orange . . . . . . . . 25
926 Gilbert's Green Flesh . . . . . . 25
927 Lord Beaconsfield . . . . . . . . 25
928 Bishop's Favorite . . . . . . . . 25
929 White-fleshed Prescott. The popular sort with Paris market-gardeners for greenhouse culture. 25

## FRENCH VARIETIES

We These sorts ripen outdoors here, and are well worthy of cultivation.
930 Red-fleshed Lyons. Almost solid, orange flesh of the finest Pkt. quality . . . . . . . . . . . \$o o5
93I Green-fleshed Provence . . . . . . 25
932 Orange-fleshed Treveux . . . . 25
933 Nevers Warted . . . . . . . 25

long island beauty muskmelon (See page 261

## MELON, WATER

Melon d'Eau Zandia Maffermelone

Culture.-Treat the same as Musk Melon, except that they should be planted 8 or io feet apart, according to variety. Light soil is best.

|  | Perpkt. Per | - Oz |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 950 | Black Diamond. Dark green, tough skin ; large size, round. . . . . . \$0 05 |  | \$0 20 | \$0 60 |
| 951 | Black Spanish. Large, roundish, nearly black; dark red flesh ; early. . o5 | 10 | 30 | - |
| 952 | Boss, Oblong, dark green ; flesh deep scarlet, and rind thin ; intermediate. 05 | Io | 20 | 60 |
| 955 | Blue Gem, or Iceberg. Bright red flesh ; very sweet ; fine shipper . . . . o5 | 10 | 20 | 60 |
| 956 | Citron, Green Seed. Used for preserves; green seed . . . . . . . . . . o5 | 10 | 25 | 75 |
| 960 | Citron. Round and handsome ; for preserving ; red seed . . . . . . . . 05 | 10 | 25 | 75 |
| 961 | Cole's Early. Medium size ; red flesh ; green skin . . . . . . . . . . . o5 | Io | 30 | 0 |
| 962 | Cuban Queen. Solid and heavy ; skin marked regularly ; excellent quality; early | Io | 20 | 0 |
| 963 | Dixie. Excellent quality; very large and solid ; flesh red ; intermediate . o5 | 10 | 20 | o |
| 964 | Duke Jones. Large, handsome, dark green ; red flesh of fine flavor . . . o5 | Io | 20 | () |
| $964 a$ | Early Fordhook. Extra-early ; good size, green skin, red flesh . . . . . 05 | Ic | 30 | I co |
| 965 | Florida Favorite. A superior strain; improvement on Rattlesnake; intermediate . . . . . . . . . . . . . . . . . . . . . . . . . . . 05 | 10 | 30 | - |
| 966 | Goodwin's Imperial. Crimson flesh of fine quality ; small, nearly round; extra-early | 10 | 25 | 75 |
| 967 | Hungarian Honey. A very early sort. Fine for northern latitudes; perfectly round; flesh brilliant red . . . . . . . . . . . . . . . . . . o5 | 10 | 25 | 75 |
| 968 | Ice Cream, White Seed. Very early ; red flesh . . . . : . . . . . . 05 | Io | 20 | 60 |
| 969 | Icing, Dark. Solid, dark green skin ; superior quality ; white seed ; early . o5 | Io | 20 | 60 |
| 970 | " Light. Round ; pink flesh of fine quality . . . . . . . . . . 05 | Io | 20 | 60 |
| 971 | Jordan Gray Monarch. Largest grown ; crimson flesh ; late . . . . . . o5 | 10 | 25 | 75 |
| 972 | Kleckley Sweets. Exceedingly sweet and fine-flavored; dark green skin, thin rind; flesh solid, scarlet and firm . | 10 | 25 | 75 |
| 2 | Kolb Gem. Large ; good shipper ; bright red flesh of fine quality ; intermediate . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 05 | 10 | 20 | 60 |

MELON, WATER, continued
973 Mammoth Ironclad. Long, very large; late; red flesh; good shipper. Per po
974 975 Mountain Sweet. An old and reliable sort. Flesh red; late . . . . . . o5 Phinney. Early, and of fine quality; very large and solid; flesh red; intermediate.

$977 \dot{\text { Rattlesnake, Southern. }} \stackrel{\text { Ob }}{60}$ long, dark and striped ; bright red flesh; late. Pkt. 5 cts., oz. Io cts. $1 / 4 \mathrm{lb} .20 \mathrm{cts} ., 1 \mathrm{~b} .60 \mathrm{cts}$.
$97^{8}$ Seminole. Very large; quality first-rate ; intermediate. Pkt. 5 cts., oz. 1o cts., 1/4b. 25 cts., lb. 75 cts.
980 Sweetheart. Very large; bright skin ; fine quality. Pkt. 5 cts., oz. 10 cts., 1/41b. 27 cts., 1b. 60 cts .
981 Triumph. Bluish green skin, red flesh, large ; good shipper. Pkt. 5 cts., oz. Io cts., $1 / 4 \mathrm{lb}$. 20 cts ., 1b. 60 cts .
983 Wonderful Sugar. Very sweet; handsome, oblong shape. Pkt. 5 cts., oz. Io cts., 1/1 1 lb .25 cts., lb. 90 cts .

## MARTYNIA (For Pickles) Gcmientyorn

Culture.-Sow in May in the open ground, 3 feet apart in each direction, where the plants are to remain ; or the seed may be sown in a hotbed, and the seedlings afterward transplanted. These varieties are productive, and fine for pick es. Pick when small and tender, and preserve the same as cucumbers.


## NASTURTIUM

## Capucine Maraneula Maß̧turtium

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.


## OKRA, or GUMBO

## Gombaud Quimbombo Safran

Culture.-Sow late in the spring, after the ground has become warm, in drills 3 feet apart, where the plants are to remain. Thin out to from 9 to 12 inches. They should be well manured. They may also be raised in pots or a hotbed, and transplanted.


## ORACH, or FRENCH SPINACH

Arroche Armuella



MUSHROOMS

## MUSHROOM SPAWN

Blanc de Champignon Seta Ehampignonbrut

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 beds should be made from November to February, according to the time the Mushrooms are wanted, and it requires about two months for them to iegin bearing. Secure fresh horse-dung, free from straw and litter, and mix 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, 8 inches deep and any length desired, are the proper proportions for a bed; but these may be varied. Prepare the mixture of loam and manure, making the bed in layers, and pounding down each with the back of the spade. Leave this to heat through for a few days, and as soon as the heat subsides to 9 d degrees, make holes in the bed about a foot apart each way, into which put pieces of the spawn 2 or 3 inches in diameter; fill up the holes with the compost, and at the expiration of a week or Io days the spawn will have thoroughly diffused itself through the bed. Spread a layer of fresh soil over the heap to the depth of 2 inches, and cover with 3 or 4 inches of hay, straw or litter. Examine the bed often to sec that it does not get dry. Take special care, however, when water is given, that it 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 its vitality. It is well to keep these points in mind in ordering spawn. The French spawn should be slightly moistened by sprinkling with water for two or three days before planting.


## ONION

## Oignon Cebolla Zwiebel

Culture.- Sow in rich, sandy soil, in drills i foot apart, as soon as the ground can be worked in springr Thin to 3 or 4 inches, using the rake and hoe frequently to keep down the weeds. The finest Onions are pro duced by the new method of sowing the seed in hotbed in February and March, and transplanting the seedlings to the open ground.

1060 ic 6 I

White Early Barletta. A small white Italian sort; earliest . . . . . "" Queen. Pure white, small, flat, extra-early; fine for pickling. "Pearl, Italian-Grown. Extra-early, round, white; fine
" Resina. A very small pearl strain; the earliest of all Per pkt.
\$0 05
 1062
1063
Io64
" Victoria. Italian; white, globular Victoria. Italian; white, globular . . . . . . . . . . . . . 05
" Large Portugal. The standard large flat sort of the New York markets os
IO65
1066
" Large Globe (Southport Strain.) Very large and handsome. . 05
${ }^{1067}$ "، Tripoli. Large white Italian variety . . . . . . . . . . . 05
ro6s " Mammoth Garganus, or Silver King. Larse silvery white Italian . of
1069
" Bermuda (Teneriffe-grown)
IO

| Oz | 1/lb. | Lb. |  |
| :---: | :---: | :---: | :---: |
| $\$ 020$ | $\$ 0$ | 60 | $\$ 2$ |
| 20 | 60 | I | 90 |
| 20 | 50 | 1 | 50 |
| 30 | 85 | 3 | 00 |
| 25 | 60 | 2 | 00 |
| 20 | 60 | 1 | 90 |
| 20 | 60 | 1 | 90 |
| 20 | 50 | 1 | 40 |
| 20 | 60 | 1 | 70 |
| 50 |  |  |  |



RED GLOBE ONIONS

| ONIONS, continued |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | White Vaucirard Winter. Sow in September for onions early in the spring $\$ 0.05$ |  | $\text { 3/1 } 1 \mathrm{~b} \text {. }$ | L L b. |
| 1070 | White Vaugirard Winter. Sow in September for onions early in the spring \$0 05 |  |  | \$3 00 |
| 1071 | " Dutch Round Hard. One of the best white pickling sorts . . . . . 05 | O | 50 | I 75 |
| 1072 | " Thorburn Excelsior Pickling. One of the best whites for pickling . 05 | 20 | 60 | 175 |
| 1073 | " Bunching, or Italian Silverskin . . . . . . . . . . . . . . . . . 05 | 20 | 50 |  |
| 1078 | Yellow Danvers. A standard sort ; early and a good keeper . . . . . . 05 | Io | 25 | 80 |
| 1080 | " Globe Danvers. Of more globular shape; keeps well . . . . . . 05 | 10 | 30 | 90 |
| 1081 | " Golden Pheasant. Very handsome, on style of the Danvers . . . 05 | 15 | 35 | 110 |
| 1082 | " Strasburg, or Dutch. Fine keeper; flat ; yellow skin, white flesh . $0_{5}$ | Io | 30 | 80 |
| 1083 | " Large Globe (Southport strain). The finest large yellow . . . . . 05 | 15 | 35 |  |
| 1084 | " Michigan Globe. True globe-shaped; excellent keeping qualities . o5 | Io | 35 |  |
| 1085 | " Globe Spanish, or Prizetaker. Immense size; globe-shaped . . . 05 | 15 | 45 |  |
| 1086 | " Cracker. Flat, extra-early ; fine keeper . . . . . . . . . . . . . 05 | 15 | 30 | 80 |
| 1087 | " Giant Rocca. Productive and mild; of large size; Italian . . . . 05 | 15 | 40 |  |
| 1088 | Red Australian Brown. Medium size, hard, solid; very early . . . . . . 05 | Io | 30 | 90 |
| 1089 | " Large Wethersfield. Half-early and a good keeper ; large size . . . o5 | 10 | 30 | 90 |
| 1091 | " Large Globe (Southport strain). The finest large red sort . . . . . o5 | 15 | 40 |  |
| 1094 | "6 Giant Rocca. Productive and mild ; large size ; Italian . . . . . . os | 15 | 35 |  |
| 1099 | " Mammoth Garganus. Very large Italian sort . . . . . . . . . . . 05 | 15 | 40 |  |
| IIOI | " Bermuda (Teneriffe-grown) . . . . . . . . . . . . . . . . . . . 05 | 25 | 75 |  |
| 1103 | " Bassano. Dark blood-red Italian sort . . . . . . . . . . . . . . 05 | 15 | 50 |  |
| I 104 | " Madeira Round. Light red . . . . . . . . . . . . . . . . . . . 05 | 15 | 40 |  |
| IIIO | Welsh White. The leaves are used for salad early in spring. Sow in fall. o5 | 20 | 50 |  |
| 1113 | Imported Shallot Seed. . . . . . . . . . . . . . . . . . . . . . io | 50 |  |  |
| 1117 | Chives Seed . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10 | 60 |  |  |

## ONION SETS, ETC.

Plant in drills about 12 inches apart and 4 inches in the rows. They must have high culture. These are the prices muling in January; later on they may be higher.


## PEAS

## Pors. Chicharos o Guisantes Erbjen

Culture.-A week may be gained in earliness by sowing a quantity in moist sand placed in a box in the cellar, and planting outside when well sprouted. Light, dry soil, not overrich, suits the Pea. Sow as early as the ground can be worked, and again every ten days for succession. Peas may be sown in this vicinity as late as the 2oth of August. Medium and late Peas must be planted early; Extra-Earlies may be planted again in August. Sow in single or double rows, from 4 to 6 feet apart, according to the dif rent heiglits, about an inch apart in the row (except such sorts as we note to sow thinly), and 4 inches deep. It. this climate the O'Rourke Pea, if planted from the 1oth to the last of August, will produce a fair crop for fall picking, when peas will be most acceptable. Hoe often, and keep the ground clean and fine. The tall sorts can be made to bear more freely by pinching in. The dwarf varieties may be grown in beds like bush beans, with rows about the same distance apart. The holes which are sometimes found in peas are caused by the pea weevil (Bruchus pisi). The beetles lay their eggs on the young pods, and the larvæ, as soon as hatched, make their way through the pods and into the nearest peas. If the new aphide attacks the peas, spray the vines every day with clear watcr of the same temperature as the atmosphere.

TETO Those marked with a star (*) 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. Those marked thus ( $\dagger$ ) are large-podded sorts.
(1) We supply packets of peas at no cts. each, postpaid.

|  | EXTRA-EARLY PEAS $\substack{\text { infeet } \\ \text { in feet }}_{\substack{\text { eight }}}^{\text {der }}$ |  | Per 1/2pk. | Per $\mathrm{pk} .$ | $\mathrm{Per}$ bus. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1130 | Thorburn Extra-Early Market. Our standard market-garden extraearly Pea ; productive and profitable to grow . . . . . . . . . $21 / 2$ |  |  |  |  |
| 1132 | First-of-all. First-class selected strain of extra-earlies . . . . . . . $21 / 2$ | 25 | 75 | 25 | 50 |
| 1136 | Daniel 0'Rourke Improved. Extra-early; favorite market-garden sort. $21 / 2$ | 25 | 75 | 25 | 50 |
| 1137 | Philadelphia Extra-Early. Resembles the First of All . . . . . . . $21 / 2$ | 25 | 75 |  | 50 |
| 1138 | Alaska. One of the very earliest blue Peas ; quite productive . . . $21 / 2$ | 25 | 75 |  | 450 |
|  | $\dagger^{*}$ Thomas Laxton. A cross between Gradus and one of the extra-early sorts. It ripens within a day or two of the earliest round varieties, and is very productive. The pods are large and contain 7 or 8 large size, wrinkled peas of the finest flavor. . . . . . pt. 25c. . 3 |  | 1 175 | 300 |  |
|  | $\dagger^{*}$ Gradus. This and the Thomas Laxton are the finest extra-early Peas yet introduced; Gradus is in condition to pick about four days after our Extra-Early Market. The pods are very large and well filled with large wrinkled deep green peas of finest quality. pt. 2三c. 3 | 50 | 75 | 300 |  |
| II4I | *Exonian. One of the finest extra-early wrinkled sorts . . . . . . . $2^{1 / 2}$ | 35 | 100 |  | 650 |
| 1142 | *American Wonder. Early and productive ; fine quality. | 35 | 25 | 20 | 7 00 |
| 1143 | *Sutton's Excelsior. An extra-early dwarf wrinkled Pea, fully as early as the American Wonder, with much broader pods filled with large peas of the finest flavor, and produced in greater abundance . . . . . . . . . . . . . . . . . . . . . . . pt. 25c. . 1 | 50 | 75 | 300 |  |
| 1144 | *William Hurst. Dwarf, wrinkled, on style of American Wonder . . I | 30 | 00 | 75 | 600 |
| 1145 | *Nott's Excelsior. Splendid early wrinkled sort ; very prolific. . . i | 35 | 25 |  | 850 |
| 1146 | *Alpha. An extra-early wrinkled Pea; sow thickly . . . . . . . . 3 | 30 | 85 |  | 550 |
| 1147 | *Premium Gem. Early ; straight pods, well filled . . . . . . . . . I | 30 | $1{ }^{1} 0$ |  | 650 |
| 1148 | *McLean Little Gem. Early ; straight pods . . . . . . . . . . . . 1 ¹/2 | 30 | 00 | 1 75 | 650 |
| 1150 | *Gregory's Surprise. A fine wrinkled variety, and only four days later than our Extra-Early Market . . . . . . . . . . . . . . . . 2 | 35 | I 25 |  | 750 |
|  | $\dagger^{*}$ Duke of York. Very large, long, full pods, and peas of the fi lest flavor; very early and productive; one of the finest Peas grown . . . . 3 | 35 |  |  |  |

## EARLY AND MEDIUM PEAS

${ }^{1158} \dagger$ British Empire. Large pods; peas of deep green color and finest flavor ; very productive . . . . . . . . . . . . . . . . . . . $21 / 2$ 50 I 75
$\begin{array}{llll}1 & 25 & 200 & 7\end{array}$
$\begin{array}{llll}75 & 1 & 25 & 4 \\ 50\end{array}$
$\begin{array}{lllll}85 & 1 & 50 & 500\end{array}$
75 I 25450
$\begin{array}{llll}75 & 1 & 25 & 4 \\ 50\end{array}$
$\begin{array}{llll}75 & 1 & 25 & 4 \\ 50\end{array}$
1.00175600


TELEPHONF PEAS (Sce page 33)

|  | EARLY AND MEDIUM PEAS, continued | Height in feet | $\begin{gathered} \mathrm{Per} \\ \mathrm{qt} \text {. } \end{gathered}$ | $\begin{aligned} & \text { Per } \\ & 1 / 2 \mathrm{pk} . \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { pk. } \end{aligned}$ | Per bus. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1168 | *Prince of Wales. Heavy cropper; peas |  | \$0 30 | \$0 85 | \$1 50 | \$5 0 |
| 1169 | *Champion of England. A well-known, standard variety; sow thickly |  | 25 | 75 | 25 | 25 |
| $\begin{array}{cc}\text { I } 169 a & \text { Dwarf Champion. A dwarf form of the popular Champion of Eng- } \\ \text { land; very productive; finest quality . . . . . . . }\end{array}$ |  |  |  |  |  |  |
| II70 †*Duke of Albany (American Champion). Immense pods on style of Telephone ; very superior . . . . . . . . . . . . . . . . . $5 \quad 35{ }^{1} 25 \quad 20070$ |  |  |  |  |  |  |
| 1171 | Fillbasket. A standard productive variety of good quality . | . $2^{1 / 2}$ | 30 | 85 | I 50 | 550 |
| 1172 | $\dagger$ Heroine. Large, full pods ; enormously productive | . $21 / 2$ | 30 | 85 | I 50 | 550 |
| 1173 | *Daisy. Dwarf wrinkled, with large pods and peas | . $11 / 2$ | 50 |  |  |  |
| 1174 | $\dagger^{*}$ Shropshire Hero. Very productive ; fine flavor; long, handsome pods | . $21 / 2$ | 30 | 85 | I 50 | 550 |
| 1175 | *Yorkshire Hero. A spreading variety ; very productive; sow thinly | . $21 / 2$ | 25 | 75 |  | 450 |

## MAIN AND LATE CROP PEAS

| Large straight |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | $\dagger$ *Stratagem. Very large pods ; peas of first quality . . . . . . . . 1 1122 | 35 | I | 25 | 2 | 25 |  | 5 |
| IIS4. | $\dagger^{*}$ Queen. Very large, handsome pods, filled with large, dark green peas of finest flavor; first-class main-crop variety . . . . . . . . . . $2^{1 / 2} 2$ | 30 | 1 | оо | 1 | 75 |  |  |
| 1185 | $\dagger^{*}$ Telegraph (L. I. Mammoth). Very large pods and peas; excellent . 4 | 30 |  | OO | 1 | 75 |  |  |
| 1186 | $\dagger^{*}$ Telephone. Enormous pods and peas of best quality . . . . . . . 4 | 30 | 1 | 00 |  | 75 |  |  |
| 1187 | White Marrowfat. A favorite; heavy yielder | 20 |  | 60 |  | oo |  |  |
| 1188 | Black-Eyed Marrowfat. Very hardy and prolific ; for market . . . . 3 | 20 |  | 60 |  |  |  |  |

## SUGAR PEAS (EDIBLE PODS)

Sugar peas have edible pods which are eaten when young.


PARSLEY and PARSNIP. See page 34 .

## PEPPER

Piment Pimiento Bjeffer

Culture.-Sow in hotbeds in March, and, when the soil has become warm, set in rows 2 feet apart and 18 inches in the rows; hoe frequently. The plants may also be forwarded in small pots.

$$
\text { Per pkt. } \mathrm{O} z . \quad 1 / 4 \mathrm{lb} . \quad \text { Lb. }
$$

IIg8 New Upright Sweet Salad. For description see Novelties. Pkt. is cts., 2 pkts. 25 cts.

Chinese Giant. Very large ; flesh very mild and thick ; bright scarlet color\$0 io \$0 50
\$1 75 20 mild flavor that it may be eaten as a vegetable ... ......
Calabrese, Red-pointed. About 6 inches long ; thick and fleshy, ending in a point ; dark purple color
o5
30 Cayenne, Long Red. Bright red, slender pods, 3 inches long; pungent . o5 Celestial. At first fruit is yellow, but when fully matured a deep scarlet $0_{5}$
I 206 Elephant's Trunk. Long scarlet fruits, shape of an elephant's trunk . . o5 05
20

25
25
Golden Dawn, Sweet. Very handsome and distinct, and of mild flavor; small
o5

$75 \quad 225$
Golden Queen, Mammoth. Very large fruits; rich, golden yellow color;

I 209
I 210
I2IIII 223
early
o5
Long Black Mexican . . . . . . . . . . . . . . . . . . . . . . . . . Io1217 Squash, Large. Productive; for pickles . . . . . . . . . . . . . . . .

Monstrous. Very large and of mild flavor ; for use when green . . . . $0_{5}$
Oxheart. Heart-shaped, medium size ; fine for pickling . . . . . . . . 05
Red Cherry. Cherry-shaped; for pickles, for which they are largely used o5
Red Chili. Very productive ; very small, red and very pungent . . . . 05
Red Cluster. A new type of Chili, with upright, bright red fruits . . . 05
Red Harold. Size, shape and color of Ruby King, but the fruits grow upright above the foliage, thus ripening better. Mild; fine for stuffing o5
$75 \quad 250$
85.300
$60 \quad 225$
853 оо
$75 \quad 25^{\circ}$
$75 \quad 225$
$75 \quad 250$

Sweet Spanish. Large, mild; used for salad . . . . . . . . . . . . 05
o5
05
$25 \quad 75 \quad 250$
25
25
20
25
25

75250
75250
60200
$75 \quad 2 \quad 25$

## PARSLEY

Persil Perijil Beterfilie
CULTURE.-Soak the seeds a few hours in lukewarm water, and sow early in spring, and until the middle of July, in drills I foot apart. Thin out the plants to 4 inches. To preserve in winter, transplant to a light cellar or coldframe. No. 124I should be thinned out while young, and managed in after cultivation the same as carrots and parsnips.


# PARSNIP <br> Panais Chirijia Baミtinafe 

Culture.-Sow as early in the spring as the ground can be worked, in rich soil, in drills i8 inches apart. The ground should be well and deeply dug. Thin to 6 or 8 inches in the rows. Hoe and cultivate often to keep down weeds.


## PUMPKIN

## Potiron Calabaza Groß̉e $\mathfrak{F u ̈ r b i n ̃ ~}$

Culture.-May be planted middle of spring, among the Indian corn or in the field or garden, in hills 8 or ro feet apart each way, four seeds in a hill. In other respects are cultivated in same manner as melons and cucumbers. Avoid planting them near other vines.

|  |  |  | 2/4. |  |
| :---: | :---: | :---: | :---: | :---: |
| 1270 | Large Cheese. Flat ; one of the best varieties for family use . . . . . \$o o5 | \$0 Io | \$0 20 | \$0 60 |
| 1272 | Early Sugar. Fine-grained, sweet and prolific; small yellow . . . . . 05 | Io | 25 | 70 |
| 1275 | Jonathan. Large, white crookneck; fine for pies . . . . . . . . . . . o5 | 10 | 25 | 75 |
| 1277 | Golden Oblong. Orange skin, light yellow flesh; fine quality, good keeper. o5 | Io | 25 | 80 |
| 1278 | Cushaw. A fine crookneck variety of excellent quality . . . . . . . . o5 | 10 | 25 | 70 |
| 1279 | Tennessee Sweet Potato. Bell-shaped ; thick, white flesh ; fine for pies . o5 | 15 | 30 | 90 |
| 1280 | Calhoun. Very superior quality ; yellow flesh ; fine for pies . . . . . . 05 | Io | 25 | 70 |
| 1281 | Japan Crookneck. Fine keeper, of first quality . . . . . . . . . . . . 05 | IO | 30 | 90 |
| 1282 | Red Etampes. Medium size, flat ; very productive . . . . . . . . . . o5 | 15 | 50 |  |
| 1283 | Mammoth King. Grows to an enormous size . . . . . . . . . . . . . o5 | 15 | 50 |  |
| 1285 | Mammoth Tours. A very large French variety . . . . . . . . . . . . 05 | Io | 25 | 70 |
| 1286 | Winter Luxury. A fine keeper and one of the best for pies . . . . . . 05 | Io | 25 | 75 |
| 1287 | Connecticut Field. Grown in corn fields for stock | 10 | 15 |  |

##  <br> Pomme de Terre Patatas תartoffern

Culture.-In order to have the best success in growing Potatoes, it is necessary to plant as early as the ground can be made ready. Select a rich soil, and plant in rows 3 feet apart, and the sets I foot in the rows. 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 for 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 hotbed 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 80 parts of plaster; or what is better, mix the Paris green in water, one small tablespoonful 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 clean off all the beetles. Three to 4 barrels to the acre.

These are the prices ruling in January; later on they may be higher.
EARLY VARIETIES


NOROTON BEAUTY POTATO, FROM PHOTOGRAPH

## EARLY POTATOES, continued

1304 Thorburn's Beauty of Hebron. Slightly flesh-colored skin, with pure white
flesh. Very productive and of the finest quality; a first-class early variety \$0 40 \$0 70 \$2 $25 \$ 30$ Bliss' Triumph. Extra-early ; fine bright red skin, white flesh . . . . . 40
1308 Early Norther. Extra-early, very prolific ; shape of Early Rose ; fine quality
Bovee. Extra-early, very productive ; of fine quality ; flesh white. . . . 40
Early Rose. Popular market sort ; very early, fine quality; very productive 40
Crine's Lightning. Extra-early ; extremely productive and of good quality ;
russet skin . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 40
1312 Queen. Early, productive, and of fine quality
40
I3I3 Crown Jewel. Very early ; pink skin ; very productive; fine quality . . . 40

| 70 | 2 | 25 | 4 | 00 |
| :--- | :--- | :--- | :--- | :--- |
| 7 O | 2 | 25 | 4 | 00 |
| 70 | 2 | 25 | 4 | co |
| 70 | 2 | 25 | 4 | 00 |
| 70 | 2 | 25 |  |  |
| 70 | 50 |  |  |  |
| 7 O | 2 | 25 | 4 | 00 |
| 70 | 2 | 25 | 4 | 50 |

## INTERMEDIATE AND LATE VARIETIES OF POTATOES

1314 Gold Coin. A splendid new main crop variety of remarkable productive-
ness and finest table quality; slightly oblong form, light golden skin;
flesh pure white, fine-grained, cooks very dry . . . . . . . . . \$o
1315 Carman No. I. This most valuable Potato was introduced by us in 1894, and it is a recognized high-class standard sort the world over. The finest second-early Potato ever offered
1318 Uncle Sam. Handsome shape, good size, fine quality ...........
I319 Sir Walter Raleigh. Very productive; white flesh of best quality. . . . 4u
I 320 Rural New-Yorker No. 2. Very few and shallow eyes; pure white skin and flesh; immense yielder ; fine table quality . . . . . . . . . . . . . 40
132I
Green Mountain. Oval shape, white skin and flesh; excellent; heavy jielder. 40
$\begin{array}{lll}2 & 25 & 375\end{array}$
$\begin{array}{llll}70 & 2 & 25 & 4\end{array}$
$\begin{array}{lll}70 & 25 & +50\end{array}$
$\begin{array}{lllll}70 & 2 & 25 & 3 & 75\end{array}$
$\begin{array}{lllll}70 & 2 & 25 & 3 & 75\end{array}$

# RADISH 

Radis et Rave Rabanos y Rabanitos Mabiej und Mettig

Culture.- Sow as soon as the ground is dry in the spring, in rows 8 to i2 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. They should be sown in light, rich soil, as a crisp Radish cannot be produced in heavy soils. Sow also in early fall for late crops and winter use. Sow 8 to io pounds to the acre. Radishes should be eaten when quite small; it is a mistake to let them grow too long and too large. This applies particularly to the French Breakfast and small turnip-shaped sorts.

The Those marked with an asterisk ${ }^{\left({ }^{( }\right)}$) are best suited for market-gardeners.



SCARLET GLOBE RADISHES

I 353 * 0 live-shaped Golden Yellow. A new sort of very fine quality. Pkt. 5 cts., oz. Ioc., $1 / 4 \mathrm{lb} .20 \mathrm{c} ., \mathrm{lb} .6 \mathrm{c}$.
I 354 *Olive-shaped White. Mild and fine for summer. Pkt. 5 cts., oz. Io cts., 1/4 lb. $20 \mathrm{cts} ., 1 \mathrm{lb} .60 \mathrm{cts}$.
I 355 *Olive-shaped White Forcing. A forcing strain of the above. Pkt. 5 cts., oz. Io cts., 1/4 lb. 25 cts., lb. 8o cts.
r $356^{*}$ Olive-shaped Deep Scarlet. Crisp; very early. Pkt. 5 cts., oz. Io cts., 1/4 1 b . $20 \mathrm{cts} ., \mathrm{lb} .60 \mathrm{cts}$.
r 357 *Olive-shaped Deep Scarlet Forcing. A forcing strain of the above. Pkt. 5c., oz. Ioc., 1/4 lb. 25c., lb. 8oc.
1359 *Olive-shaped Red Rocket, Deep Scarlet Forcing. Very early. Pkt. 5 cts., oz. Io cts., $1 / 4 \mathrm{lb} .25 \mathrm{cts} ., 1 \mathrm{lb} .75 \mathrm{cts}$.
I 360 Half-long Deep Scarlet (Paris Beauty). Flesh bright and crisp. Pkt. 5 cts ., oz. Io cts , $1 / 4 \mathrm{lb} .20 \mathrm{cts} ., \mathrm{lb} .65 \mathrm{cts}$.
I36I Half-long Delicacy. Half-long, smooth, snow-white ; fine forcer. Pkt. 5c., oz. Ioc., 1/4 lb. 25c., lb. 7oc.
I 362 Half-long Munich. White skin, mottled with brown ; fine. Pkt. 5 cts., oz. Io cts., $1 / 4 \mathrm{lb} .20 \mathrm{cts} ., \mathrm{lb} .60 \mathrm{cts}$.
${ }^{1} 364$ *Long Scarlet Short Top. Very long, crisp; for frames or outdoors. Pkt. 5 cts., oz. 1o cts., $1 / 4 \mathrm{lb} .20$ cts., lb. 50 cts .
${ }_{1} 365$ Long Brightest Scarlet White-tipped. Pkt. 5 cts., oz. Io cts., $1 / 4 \mathrm{lb} .20$ cts., lb. 55 cts.


## ROQUETTE

Culture.- Sow early in spring, in rows, and thin out to 8 or io 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. Pkt. 5 cts., oz. 1o cts., 1/4 lb. 30 cts., lb. $\$ 1$.

## RHUBARB

Culture. - Sow seed in a coldframe, in a fine, rich sandy loam, about the first of March, in drills 4 inches apart. Keep the frame covered during nights and cold days, so that the soil will not freeze, and in six or eight weeks the plants will be large enough to set in the open ground. Transplant to a rich soil, and set in rows 12 inches apart and 12 inches in the row. The following spring transplant again to permanent location, setting 4 or 5 feet apart each way. In good soil Rhubarb is ready to use the second year from seed. When roots are set out, plant them 4 or 5 feet apart each way, and keep the weeds down. If roots are used, a crop may be had after one season, which is much better than sowing seed where only a few plants for family use are needed. In the fall the bed should have a thick dressing of coarse manure, to be spaded under in spring.


## THE NEW CRIMSON WINTER RHUBARB

This wonderful new vegetable, introduced by Mr. Luther Burbank, produces marketable stalks the first season from seed. The stalks are of medium size, well-grown ones averaging twelve to eighteen inches in length and about $3 / 4 \mathrm{inch}$ in diameter. They are of a pale greenish crimson color, turning when cooked to a light, clear crimson, and are of the very best quality. It starts to grow vigorously by October, and continues to produce stalks continually until after the common varieties make their first appearance some six months later. For forcing under glass in the cold northern states, for a constant supply for home use and for growing in California and the southern states for shipping North and East, it promises to become more profitable than anything else which the soil produces. It should be planted about 3 by 6 feet apart. It withstands ordinary frosts which would destroy any other kind, and will produce a heavier crop than any of the common Rhubarbs It comes true from seed; the individual plants vary slightly in size and foliage, but never from its fixed habit of winter growth. Per packet, 10 cts .

## RAMPION

## Raiponce Reponche Rapunzer=Rübe

Culture.-Sow in the open ground early in May, either broadcast or in drills io inches apart. As the seed is very fine, it merely requires to be pressed firmly into the soil. Thin out the seedlings if they come out too thick, and water frequently during hot weather. The roots may be gathered for use from October onward throughout the winter.


# SALSIFY, or VEGETABLE OYSTER <br> Salsifis Ostion Vegetal Sajerwurzel 

Culture.-Sow as early as the ground can be worked in the spring, in drills 12 inches apart, 1 inch deep, and thin out to 6 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 $1 / 2$ 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. Sow 8 to Io pounds to the acre.


## 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 3 feet apart and 18 inches in the rows. It is eaten boiled, like salsify. Pkt. Io cts., oz. 30 cts., I/4b. 85 cts., 1b. $\$ 2.50$.

## SCORZONERA

## Scorzonere Escorzonera Scorzionwurzel

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. Pkt. Io cts., oz. 20 cts., I/ 1 lb . 60 cts., $1 \mathrm{lb} . \$ 2$.

## SORREL <br> Oseille Acedera Sauerampfer

Culture.- Sow in spring in drills 18 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 twothirds Spinach. It is also used for soups. 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.


## SPINACH

## Epinard Espinaca Spinat

Culture.-Sow in early spring, in drills a foot apart ( I to I 2 lbs . to the acre), every two weeks for a succession, and as it grows, thin out for use. For fall use sow in August and for winter crop in September. Cover that which is left out over winter with straw or leaves, after the weather becomes quite cold. Keep clear of weeds. Sow the seeds of New Zealand in hills 2 feet apart each way, three or four seeds in a hill. This is fit for cutting all summer.

| 1460 | Round Viroflay (Thick-leaved). Has very large, thick, dark green leaves the favorite market-gardeners' sort for fall or spring sowing . |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1462 | Round-leaved Flanders. A standard sort | 05 | 10 | 15 | 40 |
| 1464 | Lettuce-leaved. Popular French sort | o5 | Io | 15 | 40 |
| 1466 | Curled-leaved Savoy, or Bloomsdale. Large curled and wrinkled leaves tender, and of the finest flavor | 05 | 10 | 5 | 5 |
| 1467 | Long-standing (Round Thick-leaved). Dark green; leaves large and thick ; very long-standing. Best for spring growing . . . . . . | 05 | ıо | 15 | 30 |
| 1468 | Victoria. Extra dark black-green color. Two or three weeks later than the ordinary "Long-standing." A fine variety for spring sowing | 05 | го | 15 | \% |
| 1469 | Prickly, or Winter. Vigorous and hardy; recommended for fall sowing. | ${ }^{5}$ | го | 15 | 30 |
| 1470 | New Zealand Summer. This plant is not a spinach, but is used a such; it grows $11 / 2$ feet high and is very prolific; grows well dur ing hot summer weather when the ordinary Spinach cannot be had, and is most valuable for hot climates. The seed should be |  | 10 | 30 | 80 |

Colrrge Calabaza Extife תürbib
Culture.-Sow in hills in the same manner and at the same time as Cucumbers and Melons, the bush varieties 3 to 4 feet apart, and the running kinds from 6 to 9 feet apart.


BUSH VARIETIES
I 500 Early Golden Bush. Fine for summer; not as early as the White Bush. Pkt. 5 cts., oz. io cts., $1 \nmid 1 \mathrm{lb} .25$ cts., lb. 75 cts.
1502 Golden Custard. Mammoth strain of the Golden Bush. A valuable new bush variety ; golden yellow flesh ; fine quality. Pkt. 5 cts., oz. Iocts., 1/41b. 25 cts., lb. 8o cts.
${ }^{1} 504$ Early White Scallop Bush. A good early shipping variety. Pkt. 5 cts., oz. Io cts., $1 / 4 \mathrm{lb} .25$ cts., lb. 70 cts .
1506 Long Island White Bush. An improved strain of Early White Scallop Bush ; very prolif.c. Pkt. 5 cts., oz. Io cts., $1 / 4 \mathrm{lb} .30 \mathrm{cts} ., \mathrm{lb} .90 \mathrm{cts}$.
Perpkt. Oz. 1/41b. Lb.

1507 Silver Custard. A mammoth strain of Early White Bush. Very large. \$o o5 \$o io \$0 25 \$0 80
${ }_{1} 508$ Summer Crookneck. Yellow fruit ; distinct ; best for summer . . . . . 05 Io 2575
1509 Giant Summer Crookneck. Double the size of the above 05 Io
I5IO Giant Summer Straightneck. Most of them are straight-necked . ...
I5I2 Cocozell Bush. A fine variety; oblong shape; skin smooth, dark green, marbled yellow or pale green
05 Io 25

## RUNNING VARIETIES

1530 Bay State. Hard, blue shell ; for fall or winter . . . . . . . . . . . . 05
1532 Boston Marrow. Oval ; bright orange ; flesh yellow and fine . . . . . o5
1534 Brazilian Sugar. Yellow, warted, oblong; fine for summer or autumn . o5
${ }^{1} 537$ Cocoanut. Of first-rate quality, and very prolific . . . . . . . . . . . 05
5

| 10 | 30 |  |
| :---: | :---: | :---: |
| Io | 25 | 75 |
| 10 | 25 | 75 |
| 10 | 30 | I 00 |
| 15 | 40 | I 25 |
| 10 | 25 | 90 |
| 10 | 40 | I 25 |
| 15 | 30 | I 00 |
| ro | 35 | 1 Io |
| 10 | 30 | 90 |
| Io | 30 | I 00 |
| 10 | 30 | I 00 |
| 15 | 50 | I 50 |
| 15 | 50 | I 50 |
| IO | 30 | 90 |
| 10 | 30 | I oo |
| 10 | 30 | 90 |
| Io | 25 | 75 |
| Io | 30 | I co |
| 10 | 30 | 100 |

## VEGETABLE MARROW

Perpkt. Oz. y/4 lb. Lb. yellow; white flesh; about 9 inches long. . . . . . . . . . . . \$0 o5 \$0 10 \$0 30 \$1 oo Italian (Cocozelle di Napoli). Grows about 20 inches long, with a diameter of 3 or 4 inches. Skin smooth, dark green, marbled yellow or paler green. In Italy it is eaten when quite young


THORBURN'S I903 TOMATO

# TOMATO 

Tomato Tomates ¿iebesapjel

Culture.-Sow in a hotbed in early spring, or the seed may be sown in shallow boxes and placed in a window, when one does not wish to have the trouble of making a hotbed. Transplant to the open ground when all danger of frost is past, setting the plants 3 or 4 feet apart each way. Fruit may be had several weeks earlier by sowing seed quite early and transplanting to small pots.

I600
1605
1606 Acme. Medium size, smooth and good ; purplish pink color . . . . . $\$ 0$ o5 Atlantic Prize. Extra-early ; smooth, bright red, and of good size . . . o5
Beauty. Large, smooth, dark pinkish red; thick flesh ; regular form . . o5
i608 Best of All (Sutton's). Highly recommended for growing under glass . io
1609 Buckeye State. Very large and productive, smooth, uniform, good quality o5
16 Io Chalk's Early Jewel. Very fine; large, solid, smooth, bright red ; similar to the Stone, but early
1615 Democrat, Thorburn's. The finest large Tomato ; bright rose . . . . . io
1620 Dwarf Champion. Quite distinct, early ; fruit like the Acme . o5
1623 Earliana. Extra-early, bright red, smooth IO
1624 Enormous. Extra-large, very solid, bright red IO

1625 Favorite. Large, smooth, productive, and a good shipper . . . . . . . o5
1628 Fordhook Fancy. Bushy habit ; fruit medium size, smooth and regular . o5
1630 Fordhook First. Extra-early, fine, smooth, solid; medium size . . . . . o5
1632 Frogmore Selected. Medium size, bright deep red, smooth, very solid and fine-flavored. An excellent sort for forcing under glass

IO
1634 Freedom. Early, regular and uniform ; bright scarlet . . . . . . . . . o5
1635 Golden Queen. About size and form of Beauty ; smooth golden yellow . o5
${ }_{1636}$ Honor Bright. Rich, bright red; long keeper and fine shipping sort . . 05
1637 Ignotum. Early for so large a sort, deep red, smooth, very prolific . . o5
1638 Imperial. Early, large, smooth, solid; fine quality ; color of Beauty . . o5
1639 Lemon Blush, Thorburn's. Skin and flesh lemon, with a faint rose blush o5
1640 Long Keeper, Thorburn's. Bright red, early, very productive ; fine keeper o5
1641 Lorillard. Bright glossy red, smooth ; of fine flavor, and very early . . io
1642 Matchless. Extra-large, smooth and handsome ; bright red; very solid . c5
1643 New Jersey. Large, solid, smooth scarlet ; one of the very best . . . . o5
1647 Perfection. Early, regular and productive; reddish scarlet . . . . . . . 05
1648 Ponderosa. The largest variety in cultivation . . . . . . . . . . . . . Io
1650 Red Cherry. Small fruits, used for pickles ; very handsome . . . . . . O5

| Oz. | 5/17 1 b . | Lb. |
| :---: | :---: | :---: |
| \$0 25 | \$0 60 | \$2 25 |
| 25 | 75 | 250 |
| 25 | 75 |  |
| 30 | 85 | 3 о0 |
| 25 | 75 | 250 |
| 40 | I 00 | 4 oo |
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| 30 | 85 | 250 |
| 35 | I 00 | 350 |
| 35 | I 00 | 350 |
| 25 | 60 | 225 |
| 30 | 85 | 3 oo |
| 30 | 85 | 3 oo |
| 50 | I 50 | 5 о0 |
| 30 | 85 | 3 oo |
| 25 | 75 | 250 |
| 30 | 85 | 3 oo |
| 30 | 85 | 3 oo |
| 25 | 75 | 250 |
| 25 | 75 | 250 |
| 30 | S5 | 300 |
| 40 | I 25 | 400 |
| 25 | 75 | 250 |
| 30 | 85 | 300 |
| 25 | 60 | 225 |
| 40 | 1 25 | 4 00 |
| 30 | 85 | 300 |


| 1652 | TOMATOES, continued |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Red Currant. Very small and handsome; for preserves . . . . . Per, | oz. $\text { \$0 } 30$ | $\operatorname{sic}_{5 / 1 \mathrm{~b} .}^{50}$ | $\begin{aligned} & \text { L.b. } \\ & \$ 300 \end{aligned}$ |
| 1653 | Red Peach. Resembling a peach ; for preserves, pickles and exhibition ; quality excellent | 40 | 125 | 4 oo |
|  | Red Pear. Fruit handsome and solid ; fine for prese | 30 | 85 | 3 oo |
| 1656 | Red Plum. Bright red, round, regular ; for pickles . . . . . . . . . . o5 | 30 | S5 | 3 oo |
| 1659 | Rosalind, Thorburn's. Beautiful rose color ; large, uniform, round . . . io | 35 | $1{ }^{\text {co }}$ | 350 |
| 1662 | Royal Red. Intense bright red color ; good main crop variety . . . . . 05 | 30 | 85 | 3 oo |
| 1664 | Ruby Early. Very early ; large size ; bright scarlet color . . . . . . . 05 | 25 | 60 | 225 |
| 65 | Stirling Castle. Small size ; very solid, finest flavor, enormously productive; for forcing under glass |  |  |  |
| 66 | Station Upright Tree. Best tree sort, very compact in growth | 40 | 125 | 450 |
| 1667 | Stone. Very large, perfectly smooth ; fine bright scarlet . . . . . . . o5 | 25 | 60 | 225 |
| 1668 | Stone New Dwarf. In growth resembling Dwarf Champion, but with much larger fruits. Color bright scarlet, perfect shape, very solid and of the best quality | 30 | S |  |
| 1669 | Strawberry. (Winter Cherry, or Husk Tomato.) Makes fine sauce | 25 | 75 | 250 |
| 1670 | Success. Large, bright scarlet, smooth and solid ; very productive . . 05 | 3 c | 85 | 300 |
| 1672 | Table Queen. Large, smouth, round, solid | 30 | 85 | 3 oo |
| 1674 | Terra Cotta, Thorburn's. Distinct in color and flesh ; pure terra cotta . o5 | 30 | ${ }_{5}$ | 300 |
| 1676 | Thorburn's Century. Very large, extremely productive and extra-early deep scarlet, perfectly smooth, thick flesh, always full and of fine quality | 30 | 85 |  |
| 1678 | Thorburn's Earliest. The earliest of all | 35 | 1 | 350 |
| 1679 | Thorburn's 1903. Quite distinct, with velvety skin of a very bright brick red color; large, smooth, solid | 35 | 1 oo | 350 |
| 1680 | Trophy. Very solid ; standard late ; fine canner ; dark scarlet | 25 | 60 | 25 |
| 1681 | Waldorf. Perfect shape, large, smooth, solid rose | 35 | oo | 350 |
| 1682 | Yellow Cherry. For pickles and preserves . . . . . . . . . . . . . . o5 | 30 | $S_{5}$ | 3 o |
| 1683 | Yellow Peach. Beautiful clear yellow color ; a perfect resemblance of a peach . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $o 5$ | 30 | 85 | 3 |
| 1684 | Yellow Pear. Handsome, yellow, pear-shaped fruits | 30 | 85 | 3 oo |
| 1685 | Yellow Plum. Round and regular ; bright yellow ; used for pickles | 30 | 85 |  |

## SWISS CHARD, or SILVER BEET

This is a beet producing leaves only, of a superior quality to those of the ordinary Beet, and excellent 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 greatly increase the delicacy and tenderness of the leaves. Pkt. 5 cts., oz. $10 \mathrm{cts} ., 1 / 4 \mathrm{lb} .20 \mathrm{cts} ., 1 \mathrm{~b} .50 \mathrm{cts}$.

## SPROUTS

## Choux Verts non Pommes

Culture.-Sow No. 1690 very early in the spring, and Winter Kale in September. Full directions for growing the latter will be found on page 24, under the head of Kale.

1690 Spring Sprouts, or English Rape
Per pkt. Oz. $\quad$ / lb . Lb.
1692 Winter, or Siberian Kale, Thorburn Improved . . . . . . . . . . . . \$0 $05 \$ 0$ 10 $\$ 020 \quad 40$

## SKIRRET

## Chervis 马uferwurjel

Culture.-Sow in drills $1 / 2$ inch deep, a foot apart; thin out to 8 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.


RED-TOP GLOBE AND RED-TOP STRAP-LEAF TURNIPS

## TURNIP

## Navet Nabo Rübe

Culture.-For early Turnips sow as soon as ground opens in spring. Nos. 1766 to 1774 should be sown from any time in July to firs' of August; but the other kinds, for winter use, may be sown from the middle of Tuly to the end of August. Turnips are generally sown broadcast, but much larger crops are obtained (particularly of the Rutabagas) by cultivating in drills 18 inches apart, and thinning to 6 inches in the drill. Sow in drills, one pound to the acre ; broadcast, two to three pounds to the acre.
izoo Half Long White. For frames or outdoor, but must be eaten when quar- pkt. Oz. $\quad$ ¹/4b. Lb . ter size; very fine; tender
+
Early Milan Purple-Crown. Earliest of all, white with purple top . . . . 05
\$0 25
$\$ 075$

## 1701

Early Milan Purple-Crown. Eariiest of all, white with purple top . . . .
Early Milan Pure White. Very handsome, pure white, and as early as the
above; flesh very sweet and tender . . . . . . . . . . . . . . . 05
rple-Top Munich. One of the earliest . . . . . . . . . . . . . . . . 05
Io $\quad 20 \quad 60$
1702
${ }_{1705}$ Pucarlet Kashmyr. Small, flat, extra-early; pure white flesh of finest quality ${ }^{17}$
1708 White Egg. Oval, handsome and sweet . . . . . . . . . . . . . . . . 05
1709 Early Snowball. Small, and of rapid growth ; pure white . . . . . . . 05
1715 Early Dutch. Rather flat; good white early sort . . . . . . . . . . . . 05
1722 Red-Top Strap-Leaf. The popular fall flat sort . . . . . . . . . . . . 05
1724 Red-Top Globe-shaped. A standard sort in the New York market . . . . 05
1726 White Norfolk. Globular, late, solid . . . . . . . . . . . . . . . . . $o 5$
1728 White Strap-Leaf Flat. A good early white flat sort . . . . . . . . . . $o 5$
1733 White French, or Rock. Very productive and a fine keeper . . . . . . $o 5$
1738 Pomeranian White Globe. Good either for table or stock . . . . . . . . 05
1739 Cow Horn. Long, white, in shape resembling a cow's horn . . . . . . . o5
1747 Yellow Globe. Good and sweet; keeps fairly well . . . . . . . . . . . 05
1748 Thorburn Yellow Stone. Fine, hard winter sort . . . . . . . . . . . . 05
1749 Golden Ball. Very handsome; keeps fairly well . . . . . . . . . . . . o5
${ }_{1750}$ Yellow Finland. Early and of fine flavor ; small, flat, distinct . . . . . o5
1752 Yellow Aberdeen. Hardy, productive, and a good keeper . . . . . . . 05
${ }_{1753}$ Yellow Malta. Early and of fine flavor . . . . . . . . . . . . . . . . 05
${ }_{1756}$ Yellow Tankard. Long shape; good keeper . . . . . . . . . . . . . . ${ }_{5}$
${ }_{1757}$ White Tankard. Long-shaped; a good keeper . . . . . . . . . . . . 05
1766 Rutabaga, Thorburn Family. A fine strain for family use ; finest quality. o5
1767 " Thorburn Purple-Top Improved . . . . . . . . . . . . . . . 05
${ }^{1768}$ " Champion Purple Top. Very large . . . . . . . . . . . . . 05
1769 " Laing's. One of the earliest . . . . . . . . . . . . . . . . 05
10 $25 \quad 75$


# Seeds of Pot, Sweet and Medicinal Herbs 

Agrimony. For medicinal purposes
Angelica, Garden. For flavoring wine and cakes
Anise. Seeds aromatic and carminative
Arnica. Tincture of arnica is made from it
Balm. For culinary purposes
Basil. Dwarf or Bush. Culinary herb Sweet. Culinary herb used for flavoring soups, etc.
Belladonna. U'sed in medicine
Bene. The leaves used for dysentery
Borage. Leaves used as a salad
Caraway. Used in flavoring liquors and bread
Catnip. Has medicinal qualities
Chamomile.
Coriander. Seeds aromatic
Cumin.
Dill. Seeds used for flavoring vinegar
New Mammoth. Much larger than above
Elecampane. Has tonic and expectorant qualities
Fennel, Sweet. Seeds aromatic ; for flavoring
Florence. In flavor resembling celery
Foxglove, Purple. Has medicinal qualities
Fumitory. A medicinal herb
Gromwell. A medicinal herb
Hemlock. Has medicinal qualities; poisonous
Henbane. Has medicinal qualities; poisonous
Horehound. Has medicinal qualities
Hyssop. Has medicinal qualities
Lavender, True. For oil and distilled water For oil and distilled water
Lovage. Has medicinal qualities
Marshmallow. Has medicinal qualities
Marigold, Pot. The flowers dried or fresh are used in soups
Marjoram, Pot. Used in seasoning . . Sweet. Used in seasoning
Mint, Curled Mint
" Peppermint
Pæony officinalis. Has medicinal qualities
Pennyroyal. Has medicinal qualities
Rosemary. Yields an aromatic oil and water
Rue. Said to have medicinal qualities
Saffron. Used in medicine, and also in dyeing
Sage, Common. A culinary herb; also used in medicine
"' Red. Used as a culinary herb; also in medicine
" Purple. Used as a cuiinary herb; also in medicine
Savory, Summer. Used as a culinary herb
" Winter. Used as a culinary herb
Tansy. Generally used in bitters
Tarragon. True. Does not produce seed. Roots in fall and spring . . . . . . . . . 35 cts . each, $\$ 3.50$ per doz.
Thyme, Broad-leaved English. Used as a seasoning . French
Wormwood. Has medicinal qualities

| Perpkt. <br> \$0 IO |  | Lb |
| :---: | :---: | :---: |
| Archangelica officinalis . 05 | 15 | \$1 |
| Pimpinella anisum . . 05 | Io |  |
| Arnica montana . . . . Io | So |  |
| Melissa officinalis . . . . 05 | 30 |  |
| Ocymum minimum . . . 05 | 15 |  |
| Ocymum basilicum . . . 05 | 15 |  |
| Atropa Belladonna . . . Io | 60 |  |
| Sesamum orientale . . . o5 | Io |  |
| Borago officinalis . . . 05 | - |  |
| Carum Carui . . . . . 05 | 10 |  |
| Nepeta cataria . . . . . Io | 40 | $+0$ |
| Matricaria Chamomilla . io | 75 |  |
| Coriandrum sativum . . 05 | ı0 |  |
| Cuminum Cyminum . . 05 | Io |  |
| Anethum graveolens . . 05 | 10 |  |
| Anethum graveolens . . 05 | I5 |  |
| Inula Helenium . . . . . io | 60 |  |
| Anethum Fœniculum . . 05 | Iо |  |
| Anethum Fæniculum . . o5 | 15 |  |
| Digitalis purpurea . . . . 05 | 20 |  |
| Fumaria officinalis | 75 |  |
| Lithospermum officinale . o5 | 25 |  |
| Conium maculatum . . . io | So |  |
| Hyoscyamus niger . . . 05 | 15 |  |
| Marrubium vulgare . . 05 | 20 |  |
| Hyssopus officinalis . . . 05 | 20 |  |
| Lavendula vera . . . . . 05 | 25 |  |
| Lavendula spica . . . . 05 | IV |  |
| Levisticum officinale . . 05 | 15 |  |
| Althæa officinalis . . . 05 | 25 |  |
| Calendula officinalis . . . C5 | 15 |  |
| Origanum Onites . . . . Io | 40 |  |
| Origanum Majorana . . . 05 | 20 |  |
| Mentha crispa . . . . . 25 |  |  |
| Mentha piperita . . . . 25 |  |  |
| Pæonia officinalis . . . . 05 | 30 |  |
| Hedeoma pulegeoides . Io | 60 |  |
| Rosmarinus officinalis . . 05 | 25 |  |
| Ruta graveolens . . . . 05 | 15 |  |
| Carthamus tinctorius . . 05 | 10 |  |
| Salvia officinalis . . . 05 | 15 |  |
| Salvia Horminum . . . . 05 | 15 |  |
| Salvia Horminum . . . . 05 | 15 |  |
| Satureja Hortensis . . . 05 | Io |  |
| Satureja montana . . . . o5 | 20 |  |
| Tanacetum vulgare . . . 05 | 30 |  |

Artemisia Dracunculus
Thymus vulgaris . . . . 05
Thymus vulgaris
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. 05
Artemisia Absinthium . . 05

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Safrano. Rich saffron-yellow color, soft silky texture and fine flavor. Per oz., 2oc.; lb., \$2.
Sterling. The newest and brightest of the yellow type, and the earliest to ripen. Per oz., 25c.; per lb., \$2.
Sumatra. The finest of all for cigar-wrappers; specially grown for us in Connecticut. Per oz., 4oc. ; per lb., \$4.
Tuckahoe. Extra fine long leaf; fine for wrappers. Per oz., 20c.; per lb., \$2.
Virginia Oak Hill Yellow. Resembles White Burley in color and Oronoka in shape and habit. Unsurpassed in delicacy of fiber. Per oz., 25c.; perlb., \$2.
Virginia "One Sucker." Large leaf; wide, lanceshaped; rather coarse than fine. Per oz., 25c.; per lb., \$2.
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| :---: | :---: | :---: | :---: |
| Prices variable |  |  |  |
| Per lb. ioo lbs. \$o 10 \$9 00 | Rape, English | Per lb | 100 lbs . <br> $\$ 550$ |
| 9 oo | " German | . 10 | 550 |
| 10 550 | Rib Grass | 25 |  |
| 25 | Rough Rice | . 10 | 6 |
| 20 | Vetches for Pigeons | 10 | 45 |
| Io 450 | Gravel for Cages |  |  |
| 1o 650 | Cuttle Fish Bone | . 30 |  |
| 10 450 | Sunflower Seed for | . . 10 |  |



## VEGETABLE PLANTS <br> We shall haze all the Standard Sorts at their proper seasons.

## ESCULENT PLANTS AND ROOTS



## THE JAPANESE HORSE-RADISH "WASABI."

This is described as having a fresh sharpness that no other horse-radish possesses and as being of a light green shade of color instead of white. Though used much the same way as horse-radish in America, it is quite a different article. The cultivation is much the same as that of our common horse-radish here, but plenty of moisture is essential. Roots, 40 c . each, $\$ 4$ per doz.


## About Lawns and Lawn Grass Seed

FORMATION OF LAWNS FROM SEED

The ground should be thoroughly drained and well prepared. The soil ought not to be too rich, as a rapid growth is not wanted in the grasses of a lawn; but the surface should be as much alike in quality as possible. After sowing, the ground should be rolled in order to press the seed firmly into the soil. The proper time to sow grass seed depends, of course, upon the latitude. In the central and eastern states from March 15 to April 15 is the best time. Seed may also be sown in the fall, provided it is done early enough to secure a good, strong growth before winter sets in. The sowing should be done when the ground is moist, or before an expected rain, and a subsequent rolling is always advisable.

Rolling.-As soon as the frost is out of the ground in the spring, the land should be gone over with a heavy roller. Winter frosts loosen the soil, and rolling is necessary to compress it again. If grass seed is to be sown, this should be done first and the rolling immediately afterwards. Roll frequently.

Mowing.-All turf-forming grasses are improved, both in vigor of root-growth and in fineness of texture, by frequent mowings. It is impossible to say just how often the grass should be mown, as that depends upon the rate at which it grows. Too close cutting should be guarded against, however, especially during the hot summer months, when the roots require some top-growth to protect them from the burning sun. A good top-growth is also necessary to protect the roots from severe winter frosts.

To Grass a Bank or Terrace.-For each square rod, take a pound of lawn grass seed and mix it thoroughly with 6 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.

It is a good plan to sow on good land, in any out-of-the-way place, strips for sod, to be used for patching poor parts of the lawn, or for grass borders, etc.

NS. W. We shall be pleased to make special mixtures for particular purposes, or to suit exceptional conditions of soil, situation or climate-for very sandy or clayey ground, for very dry or wet situations, for steep slopes, terraces, tennis-courts, croquet greens, polo-grounds, etc. We invite consultation about any difficulties experienced in getting the right turf for any purpose or in any place.

## THE THORBURN LAWN GRASS

Practically all the very finest lawns in America were produced from this mixture. It is composed exclusively of permanent grasses that make a finer and thicker turf the older they become, and yet give a rich green sward in three or four weeks from the time of sowing. It should be sown at the rate of 4 to 5 bushels to the acre ( 15 lbs . to the bushel). Per qt., $25 \mathrm{c} . ; 2 \mathrm{qts},. 40 \mathrm{c}$. ; $1 / 2 \mathrm{pk}$., 65 c .; pk., $\$ 1$; bus., $\$ 3.50$.

## THORBURN'S SPECIAL LAWN MIXTURE

This extra-choice mixture contains a large proportion of the finer and more expensive species, such as Rhode Island Bent, Crested Dog's-Tail, Creeping Bent, in extra-heavy samples, bringing the weight up to 20 lbs . per bushel, and producing a turf of the closest and finest texture possible. Price per bushel of 20 lbs , $\$ 5$.

## THORBURN'S LAWN-RESTORING GRASS SEED

A mixture of grasses peculiarly suited to take firm hold and grow quickly on hard, worn-out or burned spots. The best time to resow them is very early in spring, but seed may also be sown in the fall from first of September to first of October. Some Lawn-restoring Grass Seed should also be sown before every summer rain on thin places. Price per quart, 30 cts .; per bushel of 24 lbs ., $\$ 5$.

## THORBURN'S LAWN GRASS FOR THE SOUTH

A mixture of grasses that stand extremes of heat and drought well and that are therefore peculiarly adapted for southern lawns. Per bushel of 20 lbs ., $\$ 5$.

## THORBURN'S MIXTURE FOR SHADY SPOTS ON LAWNS

A mixture of grasses that thrive in shaded situations, under trees, or close to walls where there is little sun. Price per quart, 35 cts .; peck, $\$ 1.75$; bushel of 24 lbs ., $\$ 6$.

## GRASS MIXTURE FOR RAILROAD BANKS, ETC.

A mixture of grass with long, interlacing matting roots that will bind steep embankments, gravelly or sandy slopes, etc., preventing wash-outs by rainstorms and covering with permanently green turf. Price per bushel of 22 lbs., $\$ 4.50$.

## PERMANENT GRASS SEED FOR GOLF LINKS

We have given much attention to the seeding of Golf Links, and have seeded most of the finest links in the country.

FAIR GREEN MIXTURE. For the grounds in general. Per bushel of $20 \mathrm{lbs} ., \$ 2.50$.
PUTTING-GREEN MIXTURES. A mixture of extra-fine grasses, that will make a close, firm, green and lasting turf, which will improve with tramping. Per quart, 30 cts . ; peck, $\$ \mathrm{I} .75$; bushel of $2+\mathrm{lbs}$., $\$ 6$.

For Destroying Worms on putting-greens, Mr. Travis, the distinguished golfer, recommends the following formula: Take $1 / 8 \mathrm{oz}$. corrosive sublimate and mix with two quarts of water and then add 40 or 50 gallons of water and sprinkle the ground, using an ordinary watering pot.

## CELEBRATED LAWNS AND GOLF LINKS FROM THORBURN'S SEEDS <br> ST. ANDREWS GOLF CLUB <br> THE ROCKAWAY HUNTING CLUB

Messrs. J. M. Thorburn \& Co.
Gentlemen: In reply to your inquiry, I am pleased to say that the grass seeds supplied by you to the St. Andrews Golf Club the past two seasons have given excellent results, and we intend using them on our greens again this spring along with the fertilizer recommended by you Our greens-keeper reports that the patent rake which you furnished for removing wormcasts serves the purpose admirably.

Yours truly,
(Signed) J()SEPH B. THOMAS,
Chairman Executive Committee.

## THE GARDEN CITY GOLF CLUB

Messrs. J M. Thorburn \& Co.
January 9, rgor.
Gentlemen: Replying to your letter of the 8th instant, I have to say that we have been using your grass seeds upon our golf course here for the past two or three years. The seeds have proven very satisfactory, and so long as the standard of the past is maintained we shall have no hesitation in continuing their use.

Yours truly
(Signed) GEO. L. HUBBELL, Secretary.

## HARBOUR HILL GOLF CLUB

Messrs. J. M. Thorburn \& Co. January 14, 190 . Gentlemen: In reply to yours of January 8, asking me how the grass seed supplied to the Harbour Hill Golf Club has answered, I can only report favorably. The greens have steadily improved since we commenced using your seed two years ago. We have followed your advice, not only with regard to the greens, but also with regard to the fair-greens and the banks.
The seed which you recommended for the banks has answered splendidly, and we shall need more of it in the early spring.
(Signed) OTTO HOCKMEYER, Greens Committee.

Messrs. J. M. Thorburn \& Co. January 23, igor. Gentlemen: The Rockaway Hunting Club has used your grass seeds for some years on tennis-courts and polo-grounds. Also, on our new golf course, and our putting greens are, without doubt, the best in the country. The mixtures prescribed by you for specific purposes have always proved effective. We have full confidence in your advice on such matters, and take pleasure in recommending your house.

Very truly yours.
(Signed) ROCKAWAY HUNT CLUB
GEO. W. VANDERBILT'S BILTMORE ESTATE
Biltmore, N. C., February 23, 1899.
Messrs. J. M. Thorburn \& Co.
Gentlemen: It is a most difficult thing to maintain a grass area in the South, but we have many acres of fine turf at Bilt-more-the direct result of using your selected brands of Kentucky Blue Grass Seed. Indeed, all of our purchases of seeds from your firm have been most satisfactory and our business relations most agreeable. You have a standing advertisement at Biltmore that is viewed by thousands of visitors every year-a splendid recommendation, but, unfortunately an year-a splendid recommendation, but, unfortunately an (Signed) C. D. BEADI,E,
Supt. Landscape Department, Biltmore Estate.

## ENGLEWOOD GOLF CLUB

Messrs. J. M. Thorburn \& Co. February ' 5, igoi.
Dear Sirs: The Englewood Golf Club has used your grass seeds and fertilizers since the course was started, and the fine condition of our links is the best proof of their quality. Our putting greens here are often spoken of as among the best in America. They were all formed from your seed. I can also testify to the high quality of your grass fertilizer.

Yours truly:
(Signed) HARRY STARK, Greens-Keeper.

## Grass Mixtures for Meadows and Pastures

For nearly a hundred years our house has made a specialty of grasses. We were probably the first to introduce to this country, for commercial distribution, the many valuable natural and cultivated foreign species that now take such an important part in our agricultural economy. The formation of permanent pastures and meadows has for many years been a subject of careful study with us, and the following formulæ for seeding grass-lands have received universal recognition.

It is a well-ascertained fact that a thicker and more prolonged growth is produced by a mixture of many sorts of grasses than by only one or two. For every different kind and condition of soil there are grasses that are especially suitable. Some sorts do best on high ground and in dry weather ; others prefer plenty of moisture. Some mature so early, and others so late, that from the beginning of spring until winter sets in there is no time when one species or another is not at its best. Grass seed may be sown either early in spring or in fall from first of September to middle of October in this latitude. The quantities given are the minimum, and may often be increased to advantage.

## MEADOW MIXTURES FOR ONE ACRE

| No. 1. On Good Land, neither Too Dry nor Too Wet |  |
| :---: | :---: |
| 5 lbs . | Red Top. |
| 5 | Meadow Foxtail. |
| 1/2 " | Perennial Sweet Vernal. |
| 2 " | Tall Meadow Oat Grass. |
| 3 " | Orchard Grass. |
| 2 " | Hard Fescue. |
| 2 " | Sheep's Fescue. |
| 5 | Perennial Rye Grass. |
| 17 | Timothy. |
| 2 | Red Clover. |
| 1/2 " | Alsike Clover. |

Price, $\$ 2.60$ per bushel of 20 lbs . Sow 2 bushels to the acre

No. 2. For High and Dry Land 4 lbs. Red Top.
4 "، Tall Meadow Oat Grass.
2 " Meadow Brome Grass.
1/2 " Crested Dog's-tail.
5 " Orchard Grass.
Hard Fescue.
Sheep's Fescue.
Meadow Soft Grass. Timothy.
Rough-stalk Meadow.
Red Clover.
$1 / 2$ " White Cluver.
Price, $\$ 3$ per bushel of 20 lbs . Sow 2 bushels to the acre

No. 3. On Wet Late Land 6 lbs . Red Top. 2 1/2" Creeping Bent Grass.
6• Orchard Grass.
2 " Tall Meadow Oat Grass.
3 " Meadow Fescue.
I " Tall Fescue.
I " Meadow Soft Grass.
7 " Perennial Rye Grass.
Io " Timothy.
I " Red Clover.
1/2" Alsike Clover.
Price, $\$ 2.70$ per bushel of 20 lbs .
Sow 2 bushels to the acre

## PASTURE MIXTURES FOR ONE ACRE



Price, $\$ 3$ per bushel of 20 lbs .
Sow 2 bushels to the acre

No. 5. On Dry Land
3 lbs. Creeping Bent Grass.
4 $1 / 2$ " Tall Meadow Oat Grass.
"، Meadow Brome Grass.
" Orchard Grass.
" Hard Fescue.
" Sheep's Fescue.
1/2 " Perennial Sweet Vernal.
" Timothy.
" Perennial Rye Grass.
" Field Burnet.
" Sainfoin.
" Red Clover.
" White Clover.
Price, $\$ 3.25$ per bushel of 20 lbs .

No. 6. On Wet Land
4 lbs. Red Top.
5 " Orchard Grass.
" Meadow Fescue.
" Tall Fescue.
" Meadow Soft Grass.
6 " Perennial Rye Grass.
" Meadow Foxtail.
8 " Timothy.
I " Rough-stalk Meadow Grass.
8 " Kentucky Blue Grass.
I " Alsike Clover.
I " White Clover.
Price, $\$ 3$ per bushel of 20 lbs .
Sow 2 bushels to the acre

## CELEBRATED LAWNS AND GOLF LINKS FROM THORBURN'S SEEDS

## MONTCLAIR GOLF CLUB

Messrs. J. M. Thorburn \& Co.
January 9, Ig i.
Dear Sirs: The Montclair Golf Club has used your grass seeds upon its course for the past two or three years with excellent success. The Club has received great benefit from the advice given by members of your company as to the best seeds to be used in the various kinds of soils.

> In the varrous kinds of sois. Yours truly, $\quad$ (Signed) PAUL WILCOX, President Montclair Golf Club.

## NASSAU COUNTRY CLUB

Messrs. J. M. Thorburn \& Co.
January 9, igor.
Gentlemen: I heartily recommend your grass seeds for golf courses and lawns. We have been using them at the Nassau Country Club for several years with great success.

Yours truly, (Signed) HARVEY MURDOCK.
President Nassau Country Club.

## BALTUSROL GOLF CLUB

Messrs J. M. Thorburn \& Co. January i1, 1901 .
Dear Sirs: All the turf of the Baltusrol Links has been grown from seed and fertilizer supplied by your firm, and in accordance with the kind advice that you have given us from time to time, for which the Greens Comnittee beg to thank you.

Sincerely yours
(Signed) LOUIS KELLER, Greens Committee.

## THE GREENWOOD CEMETERY

Brooklyn, N. Y., February 24, 1899.
Messrs. J. M. Thorburn \& Co.
Gentlemen: I take much pleasure in stating that for a number of years we have used here large quantities of your grass seed, and have found the various kinds used to be of the best quality and satisfactory in every respect. Yours truly (Signed) EUGENE CUSHMAN, Supt.

## Grass Seeds


#### Abstract

We desire to call particular attention to the fact that Grass Seeds are sold in the trade by sample, and each sort is divided into three or four grades of quality, according to purity, germination and weight. The price of the best grade is often double that of the ordinary. The Grass Seeds here offered by us are in every case the VEKY HIGHEST GRADES.


The prices of some ravieties may cnange as the season advances. The weight per bushel is average actual weight, except in case of some sorts that are always sold by standard arbitrary weights.
AGROSTIS CANINA (Rhode Island Bent Grass). Resembles Red Top (A. vulgaris, described below), but is of dw:irfer habit, with shorter and narrower leaves. It makes a beautiful, close, fine turf, and is one of the very best grasses for lawns. It adapts itself to almost any soil, rich and moist, or dry, sandy and sterile. It is a native of Europe, but has been cultivated in our eastern states for many years. Of late years we have been unable to


AGRUSTIS VULGAKIS obtain true and pure seed of it here, and we now import it from Europe, where it has been more carefully cultivated. 50 pounds of seed to the acre is recommended for lawns. Height, I to 2 feet. ( 15 lbs . to the bushel.) Per lb., 30 cts ; $100 \mathrm{lbs} ., \$ 26$. IGROSTIS STOLONIFERA (Creeping Bent, or Fiorin). The distinctive feature of this species is, as the name implies, its compact, creeping, rooting stems. It prefers low bottom-lands, especially if they are somewhat sandy. It is of rapid grow th and spreading habit, and the stoloniferous roots form a strong enduring turf, that is positively improved by constant trampling. Being of fine texture, it is one of the most valuable of our lawn grasses. If sown alone, 50 lbs . to the acre should be used. Height, 1 to 2 feet. ( 15 pounds to the bushel.) Per lb., 28 cts.; 100 lbs., $\$ 24$.
AGROSTIS VULGARIS (Red Top; Herd's Grass). A very hardy native perennial grass, succeeding best on moist land. It accommodates itself to a variety of soils, however, even to quite dry situations, and stands our hot climate admirably. It is, perhaps, the most permanent grass we have, and it enters largely into the composition of our best natural pastures. It remains green for the greater part of the year, and its long trailing stems form a very close, matting turf, that is not affected by trampling. It grows well as far south as Tennessee. Height, 1 to 2 feet. The seed, as usually sold, weighs I4 pounds to the bushel. The bulk of this is, of course, chaff, and 4 bushels of it would be required to sow an acre. The absolutely clean or 'fancy" seed offered below weighs over 36 lbs . to the measured bushel, and 30 lbs . of it is sufficient to sow an acre. Per lb., 15 cts. ; ioo lbs., \$9.
Fancy Heavy Red-Top Grass. Absolutely clean and free from chaff. 30 lbs . to the acre. ( 36 lbs . to the bushel.) Per lb., 20 cts . ; 100 lbs., \$14.
AIRA CESPITOSA (Hassock Grass). A coarse grass, preferring stiff and marshy bottoms, and thriving in moist and shady woodlands In England door-mats are formed of it by the cottagers. 30 lbs. to the acre. ( 18 lbs. to the bushel.) Per lb., 25 cts. ; $100 \mathrm{lbs} ., \$ 18$.
AIRA FLEXUOSA (Wood Hair Grass). Delights in high and rocky hills; is of little agricultural value, except for sheep pasture. ( 12 lbs . to the bushel.) 30 lbs . to the acre. Per $\mathrm{lb} ., 25 \mathrm{cts}$; $100 \mathrm{lbs} ., \$ 18$.
ALOPECURUS PRATENSIS (Meadow Foxtail). One of the best permanent pasture grasses for rich moist lands. Its chief characteristics are its extreme earliness and its faculty of standing high summer heats without burning. Although it prefers moist, low grounds, yet it accepts drier situations, and makes an earlier spring verdure than any other variety. It should be sown only in connection with other grasses, 3 to 4 lbs. to the acre. Height, 2 to 3 ft . ( 9 lbs . to the bus.) Per lb., 35 c .; 1oo lbs., $\$ 30$.
AMMOPHILA ARUNDINACEA (Beach Grass). Valuable on the sandy seashore, canal and railway banks, etc. Its strong, creeping, matting roots bind the drifting sand into natural embankments against the action of wind and waves. This grass is usually propagated by transplanting in the fall. Where it is necessary to use seed, it snonld be sown in spring, and ground covered with brush to hold the seed in place until it has taken firm hold. Height, 2 to 3 feet. ( 15 lbs . to the bus.) Per lb., 45 c . ; ioo lbs., $\$ 38$.
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 the 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. From 2 to 3 lbs. to the acre when mixed. Per lb., 90 cts.
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. (in lbs. to the bushel.) Per lb., 20 cts. ; ioo lbs., $\$ 15$.
ARRHENATHERUM AVENACEUM (Tall Meadow Oat Grass). See Avena elatior.
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. For hay it may be cut twice a year, and for green soiling it may be cut four or five times in favorable seasons. It is very hardy, and withstands extreme drought and heat and cold. It is very valuable for our southern states, where it is extensively cultivated for winter grazing and for hay. Height, 2 to 4 feet. 50 lbs . to the acre. (I3 lbs. to bushel.) Per lb., 30 cts. ioo lbs., \$20.
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 25 lbs . to the acre. Our seed is true. Per lb.; 85 cts.
BEACH GRASS. See Ammophila arundinacea.
BERMUDA GRASS (Cynodon dactylon). A most valuable grass for our southern states, both for pasture and lawns. It is of dwarf habit, with long, creeping stems, rooting at the joints and covering the ground with a matting of fine turf, which no amount of trampling will impair. It is also useful for binding drifting sand and for steep embankments subject to wash. When once established it is difficult to eradicate, and is therefore unsuitable for temporary pastures. As it cannot endure frost, it is of no value north of Virginia. It thrives in the poorest and sandiest soil, and resists extreme drought and the most intense tropical heat. It should be sown at the rate of 15 lbs . to the acre. ( 36 lbs . to the bushel.) Per lb., 50 cts. ; ioo lbs., $\$ 45$.
blue grass, Canada. See Poa compressa.
" " ENGLISH. See Festuca pratensis.
" " KENTUCKy. See Poa pratensis.
" " TEXAS. See Poa arachnifera.
BROMUS ARVENSIS (Field Brome Grass). An annual, growing about three feet high. It makes a fair hay if cut when in flower. Per lb., 25 cts.; 1oo lbs., \$20.
bromus inermis (Awnless, or Smooth Brome Grass). An erect perennial, 3 to 5 feet high, native of Hungary, where it is considered one of the best hay grasses, yielding a good return in the arid and silicious soil. The nutritive quality of its hay, however, is much inferior to that of our standard native sorts, so that we should recommend it only for dry, arid soils, where the better and more delicate grasses would not grow. It is strongly stoloniferous, its creeping rootstocks spreading rapidly under ground and giving out new plants. It is on this account undesirable for temporary meadows, being difficult to eradicate when once established. Sow 35 to 40 lbs . to the acre. ( 12 lbs . to the bushel). Per lb., 20 cts ; $100 \mathrm{lbs} ., \$ 15$.
BROMUS MOLLIS (Soft Chess). This annual grass is so called because its stems and leaves are downy and soft to the touch. In good soil it rapidly produces an abundant forage, but of poor quality, and little relished by cattle. It can be recommended only for poor, sandy soil, where grasses of better quality would not grow. 30 lbs . to the acre. ( 16 lbs . to the bushel ) Per lb., 25 cts . ; 100 lbs. $\$ 17$.
BROMUS PRATENSIS (Meadow Brome Grass). A hardy perennial, 2 to $3^{1 / 2}$ feet high, much used in mixtures for meadows, both for mowing and pasture. It is not recommended to be sown alone except in poor soil, on dry and stony hillsides, where better grasses will not grow. It withstands extreme cold and drought, and if cut before flowering it makes a good hay. If left to grow older it becomes very tough. ( 16 lbs . to bushel.) 30 lbs . to the acre. Per lb., 25 cts .; 1oo lbs., $\$ 2 \mathrm{O}$.
BROMUS SCHRADERI (Rescue Grass). In good, rich soil several crops have been cut in a season. It cures into hay of fair, nutritive quality, but heavy and difficult to eat. For pasture, or for cutting and feeding green, it is more suitable. When first introduced it was claimed to be enormously productive, yielding five heavy crops in a year, but this and other claims of superiority have not been borne out, and the grass is not now so largely grown. Height, I to 2 feet. 30 lbs. to the acre. ( 14 lbs . to the bushel. ) Per lb., 30 cts . ; ioo lbs., $\$ 25$.
CALAMAGROSTIS ARENARIA. See Ammophila arundinacea.
CYNOSURUS CRISTATUS (Crested Dog's-tail). A stoloniferous perennial, forming a smooth, compact and lasting turf. It thrives best on rich, moist land, but it can accommodate itself to almost any soil. Its roots penetrate deeply into the ground, which enables it to stand severe droughts. It is, on this account, valuable for hilly situations. It makes a good bottom grass and is very nutritious, and is therefore


## CYNOSURUS CRISTATUS, continued GRASS SEEDS, continued

valuable in mixtures for permanent pastures. It thrives well in the shade, and is valuable for shaded parts of lawns. The color is the same as that of the Kentucky Blue Grass, and it is, therefore, excellent in mixture with that sort. If sown alone, thirty pounds to the acre is none too much, but it is recommended only in mixture with other sorts. Height, 1 to 2 feet. ( 30 lbs . to the bushel.) Per lb., 55 cts.; ioo lbs., $\$ 45$.
DACTYLIS GLOMERATA (Orchard Grass; Cocksfoot). One of the grasses most employed in permanent meadows, either for pasture or for mowing. It is very hardy and succeeds well anywhere in the United States. It is very productive and makes excellent hay. If cut before it flowers it is less hard and the pith of the stem is soft and sweet. It blossoms about the same time as Red Clover, and is therefore desirable in mixture with that plant. Stock of all kinds are very fond of it, either dry or green, and it endures constant cropping better than any other grass. After being mown it grows up quicker and yields a heavier aftermath than any other variety. It can stand considerable shade, and is recommended as a pasture grass for woodlands. Its tendency to grow in tussocks is diminished if it is sown with other grasses, and also by heavy rolling in the spring. But it is quite unsuitable for lawns. Height, 3 feet. (I 4 lhs. to the bushel.) Sow 3 or 4 bushels to the acre. Per lb., 20 cts .; ioo lbs., $\$ 17$.
DOG'S TAIL. See Cynosurus cristatus.
ELYMUS ARENARIUS (Lime Grass). Valuable on the sandy seashore, canal and railroad banks, etc. It tends, with its tough, wide-spreading and thickly matting roots, to form natural and permanent embankments, thus serving to prevent the drifting of the sand and to protect an exposed shore from winds and waves. It is of no agricultural value. (12 lbs. to the bushel.) Per lb., 75 cts.; 100 lbs., $\$ 60$.
FESTUCA DURIUSCULA (Hard Fescue). This is a variety of


DACTYLIS GLOMERATA (Orchard Grass) F. ovina, dwarfer and less vigorous in growth, but possessing all the other valuable characteristics of that variety. It is emphatically a grass for dry lands, doing well on sandy and shallow silicious soils. It is exceedingly hardy and withstands extremes of heat and cold, and also long periods of drought. For permanent pastures on poor lands it is especially valuable, but it may also be used in meadow mixtures for well-manured clayey lands. In the latter case it has been known to yield a good crop of excellent hay and a very large aftermath. On account of its stooling habit it is not recommended for lawns. Height, I to 2 feet. 30 lbs . to the acre. ( 20 lbs . to the bushel.) Per lb., 22 cts . ; 100 lbs., $\$ 15$.
FESTUCA ELATIOR (Tall Mcadow Fescue). Is a native of Europe, but was long ago introduced to this country and is now naturalized and widely grown here. It succeeds best in moist, alluvial and strong, clayey soils. It is very productive and of long duration, and is especially valuable for permanent pasture. Stock of all kinds eat it readily, and its nutritive value is said to be very great. On rich,
 moist lands it yields a large amount of hay of excellent quality. It is not suitable for lawns. Height, 3 to 4 feet. ( 22 lbs . to the bushel.) 40 lbs. to the acre. Per lb., 35 cts.; ioo lbs., $\$ 30$.
FESTUCA FLUITANS (Floating Fescue). A perennial with long, creeping roots, and preferring a rich, muddy or alluvial soil. It is found in ditches, shallow ponds, sides of rivers and lakes, and in boggy and marshy ground. As trout and wild ducks are very fond of the seeds and tender shoots, it is often introduced on the margins of ponds and rivers with the view of affording them nourishment. ( 24 lbs . to the bushel.) Per lb., 40 cts.
FESTUCA HETEROPHYLLA (Various-Leaved Fescue). A very early hardy perennial, 2 to 3 feet high, thriving best in cold, moist soils that are rich in humus and potash. In such soils it yields heavily and is valuable in grass mixtures for permanent meadows, either for mowing or grazing. Its great production of root-leaves makes it an excellent bottom grass. Its nutritive value is said to be very high. It grows very well in the shade, and is highly recommended for shaded lawns ( 15 lbs to the bushel). 40 lbs. to the acre. Per lb., 30 cts.; $100 \mathrm{lbs} ., \$ 26$.
FESTUCA OVINA (Sheep's Fescue). A native both of America and of Europe. In our northwestern states there are many varieties of it, some of which grow 2 or 3 feet high. It prefers dry uplands, and thrives in poor, shallow, gravelly soils, where other grasses would fail. It is very hardy, resisting extreme heat and cold. Though of dwarf growth, it grows thickly, yielding a large amount of very nutritious herbage, which is much relished by sheep. In grass mixtures for pastures on high and dry lands

## GRASS SEEDS, continued

it is especially valuable. Though a "bunch grass," it may be included in lawn mixtures on account of its fine foliage and dwarf, dense growth. $1 / 2$ to $11 / 2$ feet. 35 lbs . to the acre. ( 16 lbs . to the bushel.) Per lb. 20 cts.; ioo lbs., $\$ 16$.


FESTUCA RUBRA
(Red, or Creeping Fescue)

FESTUCA PRATENSIS (Meadow Fescue, or English Blue Grass). One of the grasses most used in permanent or temporary meadows for mowing or for pasture. It succeeds best in cold, moist, light soils, in welldrained meadows and in low valleys rich in organic matter. It should not be grown at all in warm, dry land. It does not reach its full development till the second or third year, when it far exceeds most other sorts in the quantity of its produce and nutritive matter. After being mown it grows again very quickly. The forage, either green or dried, is very nourishing and much relished by cattle, especially when it has been cut young. Height, 2 feet. 40 lbs . to the acre. ( 27 lbs . to the bushel.) Per lb., I8 cts.; ioo lbs. \$12.
FESTUCA RUBRA (Red, or Creeping Fescue). A creeping-rooted species, forming a close and lasting turf, and especially adapted for dry, sandy soils. It resists extreme drought, and thrives on very inferior soils, gravelly banks and exposed hillsides. It is also valuable for shady places in lawns and for binding shifting sands on the seashore. 30 lbs to the acre. ( 24 lbs. to the bushel.) Per lb., 25 cts .; ioo lbs., $\$ 20$.
FESTUCA TENUIFOLIA (Slender Fescue). This is really a variety of Festuca ovina, with much finer leaves. It will grow on very dry and inferior soils, and its dwarf habit of growth and fineness of leaf render it not unsuitable for dry slopes on lawns. It stands grazing well, is very hardy and lasts long, and may therefore be recommended for permanent pasture on high and dry situations. 30 lbs . to the acre. ( 22 lbs. to the bushel.) Per lb., 30 cts.; ioo lbs., \$26.
F0X-TAIL. See Alopecurus pratensis.
HOLCUS LANATUS (Meadow Soft Grass; Velvet Grass). This grass is of fair agricultural value, and it will thrive on poor soil where better sorts will not grow. It is perennial, very hardy and grows rapidly. As a forage plant its nutritive value is small, yet it makes a hay that is eaten readily by cattle, especially when it is sprinkled with salt. Height, i to 2 feet. 35 lbs. to the acre. Per lb., 22 cts.; 1oo lbs., $\$ 18$.

## HUNGARIAN GRASS See Panicum Germanicum.

JOHNSON GRASS. See Sorghum Halepense, page 58.
LOLIUM PERENNE (Pacey's Perennial Rye Grass). Although called a perennial, it seldom lasts more than three or four years. It is the most valuable grass of Great Britain, both for pastures and for meadows, occupying there the same relative position of importance that Timothy holds here. The cool, moist climate of England seems to suit it best, yet it succeeds very well in our middle and eastern states, and adapts itself to a great diversity of soils. The seed is large and heavy, and produces a strong, verdant growth in four or five weeks after sowing. It cures into hay that is rather hard, but having a sweet flavor, and much relished by cattle and horses. Its nutritive value, especially in mixture with Red Clover, is very great. It is excellent in mixtures for quick effects in lawns. Height, $11 / 2$ to 2 feet. 60 lbs . to the acre. ( 28 lbs . to the bushel.) Per lb., 12 cts .; ioo lbs., $\$ 8$.
LOLIUM PERENNE, THORBURN'S SELECTED DWARF. A carefully selected, short-seeded, dwarfgrowing strain, suitable for lawns. Makes a fine green turf in three weeks. Per lb., i5 cts.; ioo lbs., $\$$ I I.
LOLIUM ITALICUM (Italian Rye Grass). Though lasting two or three years under very favorable circumstances, it is practically an annual. Like the perennial Rye Grass, it is a remarkably rapid grower, and has, in addition, the advantage of standing extremes of temperature, remaining green throughout the winter, and retaining its freshness in the hottest summer months and during prolonged droughts. When sown very thickly, or in mixture with other sorts, it makes a good, dense turf, and it has been used with much satisfaction on lawns as far south as Jacksonville. On rich, moist soils it is exceedingly productive, yielding an abundant cutting in four or five weeks after sowing, and every six weeks after that until late in the fall. For temporary meadows, on soils that are neither too stiff nor too dry, it is one of our most valuable grasses. Height, $I^{1 / 2}$ to $21 / 2$ feet. 50 lbs. to the acre. ( 22 lbs . to the bushel.) Per lb., i2 cts.; ioo lbs.. $\$ 8$.
OAT GRASS. See Avena elatior.
ORCHARD GRASS. See Dactylis glomerata.
PHALARIS ARUNDINACEA (Reed Canary Grass). A very hardy perennial, preferring stiff, wet land, but also doing fairly well in dry, sandy soils. It grows well in ditches and by riversides, where its strong, creeping rootstocks render it valuable for binding the banks. Its seed also affords food for trout and wild fowl. When young it may be cut for green forage for cattle, but in its more matured state it is too coarse for this purpose. ( 30 lbs . to the bushel.) Per lb., 85 cts.


LOLIUM PERENNE (Perential Rye Grass)

## GRASS SEEDS, continued

PANICUM GERMANICUM (Hungarian Grass). One of the most valuable annual soiling plants. It grows on any ordinary soil ; withstands drought well. As it is of very rapid growth, being ready for cutting within sixty days, it may be sown in this latitude as late as the middle of July for hay, or the middle of August for green fodder. It should be cut just before blooming. Sow I to $11 / 2$ bushels to the acre. ( 50 lbs . to the bushel.) Price variable.
PHLEUM PRATENSE (Timothy). A native of Europe, but long ago naturalized in America, where it ranks as by far the most important of hay grasses. Its popular name, by which it is now known the world over, refers to Timothy Hanson, who did most to make it known and appreciated. On moist, loamy or clayey soil it produces a larger hay crop than any other grass. It is not so well suited for light, sandy soils. Though preferring a moist, temperate climate, it withstands drought and extreme heat and cold. Its hay is very nourishing and can be preserved for a long time. It should be cut when flowering, as, if left later, the hay becomes hard and coarse. It is often sown along with Red Clover, and the nutritive value of the hay is greatly increased by this mixture. Height, 2 to 3 feet. If sown alone, at least onehalf bushel to the acre should be used. The seed weighs 45 lbs . to the bushel. Several grades are always on the market, differing in purity and vitality. It is always most economical to buy the highest grade, known as "Fancy." Present price, per lb., 12 cts . ; per bus. of 45 lbs ., $\$ 2.75$.
POA ARACHNIFERA (Texas Blue Grass). A most valuable perennial pasture grass for the South. It lasts indefinitely and is a much more rapid grower than the Kentucky Blue Grass. It has proved hardy as far north as Kansas. The seed is very light. About 6 lbs . to the bushel. Per lb ., $\$ 3.50$.
POA AQUATICA ( Water Meadoze Grass). This is an excellent pas-


PHLEUM PRATENSE (Timothy) ture grass for very wet situations. It also does well in bogs and marshes, and is useful in the same way as Festuca fluitans. 20 lbs . to the acre. (II lbs. to the bushel.) Per lb., 75 cts.
POA COMPRESSA ( Canada Blue Grass). A very hardy perennial grass, with creeping rootstalks, forming a close and durable turf of fine texture. It grows on the poorest and driest soils, sandy, gravelly or clayey, standing extremes of wetness or drought, and keeping green until the severe frosts of winter. It is said to be especially valuable for dairy pastures, cows feeding on it yielding the richest milk and finest butter. It is distinguished from the Kentucky Blue Grass by its flattened, wiry stems and by its decidedly bluer color. Height, 6 to 18 inches. 3 bushels to the acre. (I4 lbs. to the bushel.) Per lb., I5 cts.; ioo lbs., \$10.
POA NEMORALIS (Wood Meadow Grass). The chief characteristic of this grass is its special fitness for shaded positions in lawns and woodland parks, where other grasses will not grow. It is very permanent and hardy, resisting extremes of heat and cold, and is one of the first grasses to show a rich green growth in the spring. The creeping roots are formed underground, and make a good turf. It is excellent for pasture, and in good soil grows tall enough for hay. 30 lbs . to the acre. (19 lbs. to the bushel.) Per lb., 50 cts . ; Ioo lbs., $\$ 42$.
POA PRATENSIS (Kentucky Blue Grass; June Grass). One of our most widely distributed and valuable native grasses. It combines more points of excellence than any other sort. It is a true peren-
 nial, lasting indefinitely and improving every year. Its densely creeping rootstalks, spreading habit, and smooth, even growth, fine texture and rich green color render it one of the very best grasses for lawns. It forms a close turf, starts very early in the spring, and lasts till frost. It succeeds in almost any soil, dry, rocky, sandy or gravelly, and stands long-continued dry weather and hot suns. It takes, however, two or three years to become well established, and should, therefore, be sown only in connection with other grasses. If the soil is specially suitable it will eventually crowd these out, and make the finest possible sward. It is one of our most valuable pasture grasses, very productive and nutritious. 3 bushels to the acre. ( 14 lbs . to the bushel.) Per 1b, 18 cts. ; ioo lbs., $\$ 12$.
POA TRIVIALIS (Rough-stalked Meadow Grass). A spreading, thickly matting, stoloniferous-rooted species, forming a fine turf, and well adapted for the more shaded portions of lawns. It thrives on rich, moist soil and in sheltered situations, but does not do well on dry land. It is very valuable for forming bottom grass in mixtures for permanent pastures. Height, i to 3 feet. ( 26 lbs . to the bushel.) 20 lbs . to the acre. Per lb., 45 cts .; ioo lbs., $\$ 40$.

RED TOP. See Agrostis vulgaris.
RYE GRASS. See Lolium Italicum
and Lolium perenne.

RHODE ISLAND BENT GRASS. See
Agrostis canina.
TIMOTHY. See Phleum pratense.

## Clovers

## Subject to change of price. Our quotations are those ruling at this time.

ALFALFA, or LUCERNE (Medicago sativa). One of the most valuable and largely grown forage plants. It requires a deep, rich, well-drained soil. It roots very deeply, the tap-root descending
 often to a depth of ro or 15 feet in loose soil. It is, consequently, capable of resisting great droughts. In the West it is the best crop for hay or for soiling. It should be sown alone, in thoroughly prepared, deeply plowed soil, at the rate of 15 to 25 pounds to the acre. The crop should be cut when the plant is coming into bloom. In suitable soil the plant is perennial, and several crops may be cut every year. Height 1 to 3 feet. Per lb., 20 cts.; ioo lbs., \$r 7 .
TURKESTAN ALFALFA. Imported from Turkestan. It is said to be hardier and more productive than the ordinary variety ; and also withstands drought much better. Per lb., 25 cts.; 1oo lbs., \$19.
ALSIKE, or HYBRID CLOVER (Tvifolium hybridum). A perennial I to 3 feet high, succeeding best ins cold and stiff soils, and in marshy lands which are too wet for other species. It grows well in the far north and in high altitudes, and can withstand severe cold. It is a good honey plant for bees. is lbs. to the acre. Per lb., 20 cts ; 100 lbs., $\$ \mathrm{~F} 7$.
BERSEEM, or EGYPTIAN CLOVER (Trifolium Alexandrinum). This Clover is said to be especially suited for a rotating crop for irrigated lands. It yields heavily in Egypt, growing a little taller than alfalfa. It is very succulent and much relished by stock. Its value as a soil renovator is also said to be very high. Per lb., 40 cts.; ioo lbs., $\$ 36$.
BOKHARA CLOVER (Melilotus alba). A most valuable sort for soiling. It grows from 3 to 5 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. $I_{5} \mathrm{lbs}$ to the acre. Per lb., 30 cts .; ioo lbs., $\$ 24$.

## CHINESE CLOVER (Astragalus sinicus). See page 56.

CRIMSON, or SCARLET CLOVER (Trifoliumincarnatum). Erect annual, I to 2 feet high, with bright scarlet flowers. It is a native of southern Europe, and is now largely grown in our southern states for improving the soil by turning under. It will not stand severe frost, and cannot be depended upon to stand the winter north of New Jersey. It makes a very valuable crop for pasturage or green manure. For hay it should be cut when in full bloom. Sow 20 lbs to the acre. Per lb., 12 cts. ; Ioo lbs., $\$ 8.50^{\circ}$.
JAPAN CLOVER (Lespedeza striata). A perennial growing about 12 inches high ; valuable only in southern Iocalities where it thrives in any soil in the driest season; it makes a fair hay, and stock eat it readily when green. It is also valuable for turning under as green manure. Sow in spring broadcast at the rate of 30 lbs . to the acre. Per lb., $30 \mathrm{cts} . ;$ roo lbs., $\$ 24$.
KIDNEY VETCH, or SAND CLOVER (Anthyllis vulneraria). A deep-rooted, 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. Sow 20 lbs . to the acre. Per lb., 30 cts.; 100 lbs., $\$ 24$.
RED CLOVER, MEDIUM (Trifolium pratense). One of the most valuable farm crops of the eastern states for pasture, soiling, hay, or for turning under for green manure. It requires a deep, rich soil, and yields two hay crops in the season. In this section it should be sown in the spring at the rate of I 5 lhs. to the acre. Per lb., 20 cts .; 100 lbs., \$I7.
MAMMOTH RED, or PEA VINE CLOVER (English Cow Grass). Grows larger and lasts longer than the common Red Clover ; valuable for plowing under. Io lbs. to the acre. Lb., 20 cts. ; 1oo lbs., $\$ 18$.
WHITE CLOVER (Trifolium repens). Some White Clover is usually included in lawn grass mixtures. It makes an excellent turf that stands constant trampling. It is of dwarf habit, the stems creeping and rooting at the joints. It spreads rapidly, and is very hardy. It is valuable in permanent pastures, its forage being sweet and nutritious. Sow in the spring. In mixtures, 1 or 2 lbs ; if alone, 8 or io lbs. to the acre. Per lb., 25 cts.; ioo lbs., \$22.
TRIFOLIUM PANNONICUM. A perennial, lasting indefinitely and yielding two heavy crops a year. It should be started in good soil, and carefully cultivated the first season, as it does not become well established till the second year. Per lb., \$1.75.
YELLOW SUCKLING CLOVER (Trifolium filiforme). Native of northern Europe. Prefers sandy clay soils ; valuable for sheep pastures ; recommended in grass mixtures for wet sandy meadows. Lb. 45c.
YELLOW TREFOIL (Medicagolupulina). An annual or biennial suitable for pastures in wet meadows or for stiff clayey soils which are too poor for Red Clover. It is very useful in some sections of the country, and is sometimes used for hay. I5 lbs. to the acre. Per lb., I5 cts.; ioo lbs., \$10.

## Cereals

Customers will please add cost of bags when ordering, as follows: $1 / 2$ bushel, 8 cents; $I$ bushel, so cents; 2 bushels, 20 cents.
Whe prices of some varieties may change as the season advances.


# Forage, Economical and Miscellaneous Seeds 

ASPERULA odorata (Waldmeister). Perennial, about 6 inches high; very fragrant flower. In Germany it is thought much of as imparting a certain bouquet to Rhine wine, making the wellknown Maitrank. Per pkt., 5c. ; per oz., 6oc. ASTRAGALUS sinicus (Milk Vetch, or Chinese Clover). Largely grown in Japan, for feeding cattle and as a fertilizer for rice fields. It is a clover like plant, with red and white flowers. Per oz., 10 cts. ; per lb., 55 cts.
AUSTRALIAN SALT BUSH. Experiments show that it thrives in soils on which nothing else will grow, and it is recommended highly for alkali soils and all regions subject to periodical drought. It is very nutritious, and good for all kinds of live stock. One pound of seed is sufficient for an acre. The soil should be well plowed and harrowed. The seed may be sown in garden bed and the seedlings planted out when 2 inches high, 7 or 8 feet apart. We offer the following three species:


BEANS-CommonEnglishHorse Bean. Per qt., 20 cts. ; per bus., $\$ 4$.
Soja 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. Thrives well in hot and dry weather; very valuable for the South, for either man or beast. Is planted at the rate of $1 / 2$ bushel to the acre, in drills $21 / 2$ to 3 feet apart, and cultivated same as Indian corn. It does not make good hay, but is good as ensilage or green fodder. Qt., 20c.; bus., \$3.
Velvet Bean (Dolichos multiflorus). Used by the farmers in Florida and Louisiana as a forage plant, and also as a fertilizer plant for turning under just in the same way as the Cow Pea. Stock readily eat the vines and leaves, and the Beans, when ground with or without the pod, are used in Jlace of oats or corn, or mixed with them. As a fertilizer for orange groves the Velvet Bean is said to be unequaled. It is planted in rows 4 feet apart and I foot in the row, 2 or 3 beans in a place, as soon as danger of frost is past. Yield, 20 to 35 bushels to the acre. Per qt., 20 cts . ; per bus., $\$ 3.50$.
BEGGAR-WEED (Florida or Giant Beggar-Weed; Desmodium tortuosum). An erect leguminous annual, growing from 3 to 8 feet high, with abundant foliage, valuable as forage or for soil renovation in subtropical regions. It is highly recommended for improving light, sterile, sandy soils by plowing under, and it also makes hay of a fine quality. It should be sown at the rate of in pounds of clean seed to the acre, after the ground is warm and moist. The seed should be but very lightly covered. If for hay, it should be cut just as it begins to bloom. Per lb., 40 cts.; per 100 lbs ., $\$ 35$.

BERSEEM. See under Clovers, page 54.
BROOM CORN ( 12 quarts to the acre). Broom Corn succeeds in a good, deep soil, fresh but not damp; it is very sensitive to cold.
Long-brush Evergreen. Per lb., 15 c . ; ioolbs., $\$ 7$. Improved Dwarf. Per lb., I5 cts.; per ioo lbs., $\$ 8$.
Early Japan. Per lb., 15 cts.; per ioo lbs., $\$ 8$.
California Golden Long-brush. Grows from 12 to 14 feet high. Per lb., i5 cts.; per $100 \mathrm{lbs} ., \$ 7$.
BROOM-Scotch (Genista scoparia). The young growth of this shrub is chiefly valuable as food for sheep and other animals in winter. It is also employed for the making of coarse brooms. Per oz., Io cts.; per lb., 50 cts.
BURNET-Common Field (Poterium Sanguisorba). Perennial ; makes excellent pasture for sheep; grows on the poorest ground-on dry, sandy or calcareous soils; resists the extremes of heat and cold. Sow in April, and again in September, with Sainfoin, Clover, Rye, Grass, etc., 30 lbs. to the acre. Per lb., 20c. ; per 100 lbs., $\$ 12$.
CANAIGRE (Rumex hymenosepalus). Used in the tanning of leather. Per pkt., Io cts.; per oz., 50 cts. ; per lb., $\$ 5$.
CAPER TREE (Capparis spinosa). Per paper, $I_{5} \mathrm{C}$. ; per oz., 75C. CASTOR BEANS (Ricinus). The plant from which castor oil is made. Per qt., 25 cts.; bus., $\$ 5$. CATERPILLARS. A curious plant. Of interest only on account of the curious fruits, from which its name is derived. Amusement is caused by mixing them in salads. Per paper, 5 cts.; oz. 40 cts .
CHICORY-Large-rooted. A perennial, remaining five or six years in the same soil, if cut before flowering. Sow broadcast in autumn or spring, either alone or with any kind of Clover. When they are dried, roasted and ground they become the Chicory of commerce, and are used in adulterating coffee. Per oz., I5c.; per lb., \$1. CHUFAS (Earth Almonds). Per lb., 30 cts.
COTTON-Sea Island. Perlb., $\mathrm{I}_{5} \mathrm{c}$. ; per ino lhs, $\$ 6$. Upland Big Boll. Very prolific. Per lb., 15 cts . ; per too lbs., $\$ 6$.
Peterkin. Per lb, 15 cts.; per 100 lbs., $\$ 9$.
COW PEAS (Vigna Catjang). Specially adapted to warm countries ; extensively grown in our southern states; also valuable in this latitude as a fodder plant; their chief value, however, is as a green crop to plow under. They require a deep, rich, sandy soil for best results. The seed should not be sown till the ground has become well warmed. I bushel to the acre, in drills; 2 to $21 / 2$ bushels to the acre if sown broadcast.
Clay. Per qt., 20 cts ; per bus., $\$ 2.50$.
Whippoorwill. Per qt., 20 cts.; per bus., \$2.50.
EMMER( sometimes advertised as "Speltz," though this name is incorrect, the true "Speltz"' being a different article). This grain belongs to the

## MISCELLANEOUS SEEDS, continued

## EMMER, continued

group of wheats known botanically as Triticum dicoccum. It is grown quite extensively in the Northwest, having been brought by the Germans from Russia, where it is considered a valuable cereal on account of its hardiness and drought-resisting qualities. It gives a good yield of grain and forage for stock feed. Per lb., io cts ; per ioo lbs., $\$ 5.50$.
ESPARTO GRASS (Stipa tenacissima). This is the true Esparto Grass, extensively grown in Spain and other parts of the Mediterranean countries for making rope, etc. Per oz., $\$ \mathbf{1} .25$.
ESPARSETTE. See Onobrychis sativa.
FENUGREEK. Annual. This seed is often sought by hostlers to give 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., 10c.; per lb., 25 c .
FLAT PEA. See Lathyrus sylvestris.
FLAX SEED. $11 / 2$ bushels to acre. Price variable.
FURZE (Ulex Europaa). Also known as Whin and Gorse. A perennial leguminous shrub, native of northern Europe. The crushed sprigs of one year's growth of this shrub furnish an excellent green fodder in winter. It grows well on barren hillsides and in sandy soil, making excellent forage. Sheep are fond of it. 25 lbs . to the acre. Per oz., io cts.; per lb., 75 cts.
GUIZOTIA oleifera. An annual from Abyssinia, from the seed of which oil is extracted. Per oz., Io cts. ; per lb., 75 cts.
HEDYSARUM coronarium, "Sulla." Per oz., io cts.; per lb., 75 cts.
HEMP. One bushel to the acre. Price variable.
HOP SEED. Per pkt., io cts.; per oz., \$r.
INDIGO SEED (Indigofera Dosua). Per oz., 25 cts.; per lb., \$2.50.
IRIS pabularia. A forage plant, flourishing in the driest and most arid soil. The seeds should be sown in beds, and the young plants set out io inches apart each way, where they are to remain, very early the following spring. Per oz., 50c.
JAPAN CLOVER. See Lespedeza striata.
JERUSALEM CORN. See Sorghum.
JUTE. Annual. Thrives in any good corn ground. Sow in drills, about 8 inches apart, 4 pounds to the acre. Requires no cultivation, as it will out-strip in growth all weeds. May be also sown broadcast. 6 to 7 pounds per acre. Per oz., Io cts.; per lb., 50 cts.
KIDNEY VETCH, or Sand Clover. See Clovers.
LATHYRUS sylvestris (Flat Pea). A perennial forage plant. The vines when cut dry out readily and make a nutritious hay, which is relished by cattle and horses. Grows well on very poor, unimproved, sandy soil, can withstand severe frusts, and roots so deeply that it is not injured by severe drought. Valuable for plowing under in a green state as a soil renovator to supply nitrogen to poor soils. It is recommended to sow seeds in a small garden bed and transplant to the field when the plants are of suitable size. Per oz., Ioc.; per lb., 8oc.
LENTILS-Best Imported (Ervum lens). Succeed best in dry, sandy soil. A leguminous annual, the seeds of which are valuable for pigeons, and are largely used for soups. Per lb., 30 cts .
LESPEDEZA striata (Japan Clover). A perennial, growing about 12 inches high, valuable only in southern localities, where it thrives in any soil

LESPEDEZA striata, continued
and in the driest season ; it makes a fir hay, and stock eat it readily when green It is also very valuable for plowing under as green manure. It is usually sown in the spring broadcast, at rate of 30 lbs . to the acre. Per lb. , 30 cts.; per ioo lbs. $\$ 24$.
LIQUORICE ( Glycyrrhiza glabra). Seed in pods, per oz., 25 cts.
LOTUS corniculatus (Bird's-foot Trefoil). Perennial, used in pastures. Cattle and sheep eat it readily, and it is said to be quite nutritious. It grows on the lightest and most sterile soils, and can withstand severe droughts. Is excellent for sowing in mixtures for dry pastures. Per lb., 40 cts ; ioo lbs., $\$ 35$.
villosus or major (Greater Bird's-foot Trefoil). Per lb., 50 cts . ; per $100 \mathrm{lbs} ., \$ 45$.
LUPINS-Yellow. Succeeds well in the poorest soil, and is exceedingly valuable for plowing in to improve sandy soils. It makes good forage either green or as hay. The seeds are very fattening when used with hay. Sow in the spring when the ground has become warm, at rate of 90 lbs . to the acre. Per lb., 20 cts .; 1oo lbs., $\$ 6.50$.
White. One of the best plants known for green manure, as it gathers large quantities of nitrogen from the air. 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., 20c.; per roo lbs., $\$ 8$.
Blue. Used for the same purpose as the white variety. Per lb., 20 cts.; per ioo lbs., $\$ 6.50$.
MADDER (Rubia tinctoria). A perennial, 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 good green fodder. Per oz., ioc.; per lb., \$r.
MADIA sativa. An annual plant, producing good sheep pasturage ; valuable in dry and warm soil. Per oz., 10 cts.; per lb., 60 cts.
millets. See Cereals, page 55.
MILLO MAIZE. See Sorghum, Branching.
ONOBRYCHIS sativa (Sainfoin, French; Esparsette, German). A perennial leguminous plant, belonging to the same family as Clover and Lucerne. It is a valuable plant for growing on barren hillsides. When once well established it lasts for many years. Sow in spring, covering the seeds quite deeply, at rate of 8o lbs. or 100 lbs. to the acre Per lb., I5c.; per ioo lbs., \$9.
OSAGE ORANGE (Maclura aurantiaca). Useful for hedges. Per oz., io cts.; per lb., 40 cts.; per $100 \mathrm{lbs} ., \$ 30$.
PEARL MILLET (Penicillaria spicata). A valuable fodder plant for the South; is enormously productive. Sow the seed in drills 18 inches apart and 8 to io pounds to the acre. Per lb., I 5 cts.; per ioo lbs, \$9.
PEAS-Canadian Field. Valuable for northern climates, for cattle-feeding, especially for milch cows. It also makes fine ensilage. It is sown broadcast in the spring and harrowed in. If sown with oats, about I bushel to the acre; in drills, 2 bushels to the acre. Price variable; See also Cow Peas.
PYRETHRUM roseum. The plant from which insect powder is made in Europe. Per oz., 5oc.
POPPY-0pium. The seed furnishes an agreeable sweet oil, used for the table, for pain'ing and for illuminating. May be sown in spring either broadcast or in drills, covering thinly. Also cultivated for opium. Per oz., 2.c.; perlb., goc.

## MISCELLANEOUS SEEDS, continued

POLYGONUM Sachalinense (Sacaline). Hardy perennial, native of the Island of Saghalin, between Japan and Siberia. Although known for many years, its merits as a forage plant have only lately been pointed out. It grows well on the poorest soils, and endures the extremes of heat and cold. Reaches a height of 10 or 12 feet, and can be cut two or three times in the season. The stems and leaves, which are very nutritious, are said to be eaten either green or dry by cattle and sheep. Seed, per oz., 50 cts.; per lb., $\$ 5$.
RAMIE-Silver China Grass (Urtica nivea). Extensively cultivated for its fiber. The seed should be germinated on cotton floating in lukewarm water, and transferred to a bed, screened from the hot sun. When the plantsare 4 inches high, transplant to a field in rows 4 feet apart each way ; when 3 feet high, turn them over and peg down, covering with earth, and they will start in every direction. Per oz., \$1 ; perlb., \$12.
RAPE-Dwarf Essex English. Largely grown in the northern United States and in Canada. It is excellent for sheep pasture, and also for soiling. It may be sown in May, and will be ready for pasturing in July and August. Or it may be sown in June or July, and yet furnish a large amount of pasture or fodder. It may even be sown after taking off a crop of early potatoes. In drills, sow 5 pounds to acre ; broadcast, io pounds to acre. Per lb., 15 cts.; per 100 lbs., $\$ 5.50$.
REANA luxurians (Teosinte). A valuable fodder plant from Central America, in growth resembling Indian corn. Well adapted to our southern states. Per oz., io cts.; lb., 60 cts.; ioo lbs., \$45.
RICE SEED, for sowing. Per lb., ro cts.; ioo lbs., \$7. See also Wild Rice.
SAINFOIN. See Onobrychis.
SALT BUSH. See Australian Salt Bush.
SACALINE. See Polygonum Sachalinense.
SCURVY GRASS (Cochlearia off cinalis). Used as a peppergrass. Per oz., 15 c.
SERADELLA. A valuable forage plant, admitting of one, and sometimes two cuttings, in one season. It succeeds well in a dry, sandy soil, and furnishes a good pasture for sheep. It may also be cured for hay. Can be sown with winter rye. About 50 pounds to acre. Per lb., 20 cts . ; 100 lbs., $\$ 8.50$.
SNAILS. Used in the same way as Caterpillars. Per paper, 5 cts.; per oz., 40 cts.
SORGHUM ( 25 pounds to acre if sown in drills. For dry fodder 2 bus. should be sown to the acre).
Early Amber Sugar Cane. Ripens wherever Indian corn matures. Per lb., 15 cts.; 1oo lbs., $\$ 5$.
Early Orange Sugar Cane. Ripens about ten days after Early Amber. Per 1b., 15 cts.; roolbs., \$5. Yellow Branching (Yellow Millo Maize). Nonsaccharine; useful for the large amount of

## SORGHOM, continued

foliage, green feed or cured fodder that it furnishes and for its grain. Per lb., 15 c .; 100 lbs . $\$ 8$. White Branching (White Millo Maize). This non-saccharine Sorghum when cut for feeding starts again from the stumps with renewed strength and vigor ; thrives in the hottest and driest localities. Per 1b., 15c.; per ioo lbs., $\$ 8$.
Red Kaffir Corn, or Sorghum. Non-saccharine. The plant is low, stalky, perfectly erect. The whole stalk, as well as the blades, cures into excellent fodder, and in all stages it is available for green feed. Per lb., 15 cts.; per roo lbs., $\$ 6.50$. White Kaffir Corn. Per lb., 15 cts.; ioo lbs., $\$ 6$. Jerusalem Corn. Per lb., 15 cts.; per ioo lbs., $\$ 8$. Haiepense (Johnson Grass). One of the most valuable southern fodder plants. On rich soils it may be cut three or four times in a season. Sow in August and September, 35 or 40 pounds to the acre. Per lb., 20 cts .; ioo lbs., \$1o.
SPURRY (Spergula arvensis). Annual. Grows well on poor, dry, sandy soils; may be sown every month from March to August. Excellent pasture for cattle and sheep; also as a fertilizer for light soil. I5 pounds to the acre. Per lb., 20 cts.; roo lbs., \$8.50.
Giant Spurry. Per lb., 20 cts.; per 1oo lbs., \$8.50.
SUNFLOWER-Large Russian. Per 1b., ıoc.; ioo lbs., $\$ 5$ (price fluctuates). TEASELS-Fuller's. Heads used for combing cloth. Require a good, deep soil ; sow in April or May. The young leaves are often used for feeding silkworms. Per lb., 40 cts.
TEOSINTE. See Reana luxurians. TOBACCO SEED. See page 44 . ULEX Europæa. See Furze.
VELVET BEAN. See under Beans, page 56 .
VETCHES-Spring Tares (Vicia sativa). Sown broadcast at rate of $I$ to $I / 2$ bushels to the acre, 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. Qt. 20cts.; bus., \$3.50. Sand, Winter, or Hairy Vetch (Vicia villosa). Thrives on poor, arid, sandy soils. It is sown either in fall or in spring, mixed with rye, for a support. Grows 3 to 4 feet high, and can be cut as soon as the bloom appears, and again for the seed. Perfectly hardy, and the produce is recommended as most nutritious. Sow from $1 / 2$ to I bushel to the acre. Qt., 25 cts .; bus., $\$ 5.50$.
WILD RICE (Zizania aquatica). A native of our northern and western states. Valuable as a forage plant for swamps and inundated lands, but chiefly as an attraction for water-fowl. Before sowing soak in water for 24 hours. Sow in water which is from 6 inches to 5 feet deep, with soft mud bottom. In running water, sow out of strong current. Per lb., 25 c .; 100 lbs., \$15.
WORMS. Used the same as Snails and Caterpillars. Per pkt., 5 cts.; per oz., 40 cts.

## Tree and Shrub Seeds

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 much 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 coldframes or boxes; if in coldframes, the sashes should be shaded and the frames raised at the corners 3 or 4 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 earth or moss. They shrivel up by too long exposure to the air, and many of them lose their power of vegetating. 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. They may not vegetate till the second year after planting, but if these seeds are received too late in the spring to expose them to the action of the frost, they may be put into 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 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.

The zarieties here offered are on hand now, or are due from foreign countries, having been collected for us of the 1907 crop. As the season advances many sorts become worthless from various causes, or are sold out, and cannot be replaced until the new crop is ready next season.

## EVERGREEN TREE SEEDS

nes We do not sell Tree or Shrub Seeds in quantities of less than an ounce of any one variety, except those quoted at over 25 cents per ounce; of these, 25-cent packets may be ordered.


EVERGREEN TREE SEEDS, conṭinued

|  |  |  |
| :---: | :---: | :---: |
| itis (Short-leaved | 45 | \$4 50 |
| monophylla ( California Nut Pine) | 30 | 300 |
| monticola (Mountain Weymouth) | 65 | 650 |
| Murrayana |  | 900 |
| Pinea (Stone Pine) | 10 | 50 |
| ponderosa (Heavy Pin |  | 50 |
| resinosa (Red Pine) | 70 | 7 00 |
| gida (Northern Pitch Pine) | 35 | 350 |
| Sabiniana (Sabine's Nut Pine) |  | 2 |
| Strobus (White Pine) | 30 | 3 о0 |
| sylvestris (Scotch Pine) |  | 200 |
| Tæda (Loblolly) |  | oo |
| Torreyana (Torrey's Pine) |  | 350 |
| Sciadopitys |  |  |
| verticillatus (Umbrella Pine of Japan) | ) 6 |  |


| Sequoia |  |  |
| :---: | :---: | :---: |
| antea (Big Tree of California) |  |  |
| sempervirens (California Redwood). | 45 |  |
| Spruce Tree. See Abies and Picea. |  |  |
| Taxus baccata (European Yew) |  |  |
| cuspidata (Japanese Yew) |  |  |
| Thuja aurea (Golden Arborvitæ) |  |  |
| compacta (Compact Arborvitæ) |  |  |
| occidentalis (American Arborvitæ) |  |  |
| orientalis (Chinese Arborvitæ) | 15 |  |
| Thujopsis d lobrata (Japanese Thuja) | 45 |  |
| Torreya Californica (California Nutmeg) | ) 25 |  |
| nucifera (Japanese Nutmeg) | 35 |  |
| Tsuga |  |  |
| Sieboldii (Siebold's Japan Spruce) | 60 |  |
| Yucca filamentosa (Adam's Needle) |  |  |

## DECIDUOUS TREE AND SHRUB SEEDS



DECIDUOUS TREE AND

| Cratægus (continued) Peroz. | er |
| :---: | :---: |
| Crus-galli (Cockspur Thorn) . . . \$0 10 | \$0 75 |
| cuneata. From Japan . . . . . . . 60 | 6 oo |
| Oxyacantha (Hawthorn) . . . . . . 10 | 50 |
| Cytisus alpinus (Scotch Laburnum) . . 15 | 180 |
| Laburnum (Laburnum) . . . . . . 10 | 75 |
| Scoparius. See Genista. |  |
| Daphne Mezereum (Mezereon) . . . . 30 | 300 |
| Daphniphyllum macropodon . . . . 30 | 300 |
| Deutzia crenata . . . . . . . . . . 20 | 50 |
| scabra (White Deutzia) . . . . . . . 30 | 300 |
| Diospyros Kaki ( Keg Fig of Japan) . . 20 |  |
| Lotus (European Persimmon) . . . . io |  |
| Virginiana (Wild Persimmon) . . . 10 | 75 |
| Dogwood. See Cornus. |  |
| Edgeworthia <br> papyrifera (Indian Paper Tree) . . . 25 | 250 |
| Elæagnus angustifolia (Oleaster) . . . 20 | 150 |
| longipes. From Japan . . . . . . . 40 | 4 oo |
| pungens (Stinging Oleaster) . . . . 40 | 400 |
| Elm. See Ulmus. |  |
| ```Eucalyptus globulus (Tasmanian Blue Gum) . . 40``` | 450 |
| Euonymus Americana (Burning Bush) . 20 | 200 |
| Europæa (European Burning Bush) . 10 | co |
| Japonica. From Japan . . . . . . . 20 | 200 |
| Exochorda grandiflora . . . . . . . . 40 | 4 oo |
| Fagus sylvatica (European Beech) . . . Io | 50 |
| Fraxinus |  |
| alba Americana( White American Ash). ıo | 60 |
| excelsior (European Ash) . . . . . . io | 40 |
| Ornus (Flowering Ash) . . . . . . io | 50 |
| Oregona (Oregon Ash) . . . . . . . 20 | 200 |
| pubescens . . . . . . . . . . . . . 15 | 50 |
| sambucifolia (Black, or Water Ash) . 10 |  |
| viridis (Green Ash) . . . . . . . . 10 | 100 |
| Fremontia Californica ( Califor. Shrub) . I 25 |  |
| Gaultheria Shallon (Cal. Winterberry) . 45 | 450 |
| Genista juncea (Rush-leaved Broom) . ıo | 75 |
| scoparia (Scotch Broom) . . . . . . io | O |
| tinctoria (Green Broom) . . . . . . 20 | 200 |
| Gingko biloba. See Salisburia. |  |
| Gleditschia horrida (Horrid Thorn) . . 15 triacanthos (Honey Locust) | O |
| 100 lbs., \$25 . Io | 40 |
| Gymnocladus |  |
| Canadensis (Kentucky Coffee Tree) . Io | 75 |
| Halesia diptera . . . . . . . . . . '. . 25 tetraptera (Silver Bell) |  |
| Hamamelis Virginica (Witch Hazel) . . 20 |  |
| Japonica (Japan Witch Hazel) . . . 75 | 8 |
| Hedera Helix (English Ivy) . . . . . . 10 | $1{ }^{0}$ |
| Hibiscus Syriacus fl. pl. (Double Rose of Sharon) | I 75 |
| Ilex glabra (Inkberry) . . . . . . . 20 | I 75 |
| decidua (Deciduous Holly) . . . . . Io | 100 |
| opaca (American Holly) . . . . . . io | 60 |
| Sieboldi. From Japan . . . . . . 40 | 400 |
| verticillata (Deciduous Holly) . . . . io |  |
| Illicium religiosum. From Japan . . . 25 | 250 |
| Indigofera Dosua (Indigo Tree) . . . . 25 | 250 |
| Juglans cordiformis. From Japan . . . Io cinerea (Butternut) per qt., 20 cts.; per bus., $\$ 4$. |  |
| Mandschurica | 75 |
| nigra (Black Walnut) . . . . |  |
| per qt., I5 cts.; per bus., \$3 |  |
| Sieboldii. From Japan . . . . . . . Io | 60 |
| Kalmia angustifolia (American Laurel). 25 |  |
| latifolia (Calico Bush) . . . . . . . 35 |  |


| Kœlreuteria |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

Japonicum (Japan, or Califor. Privet) . Io 80
$\qquad$ IO
vulgare (Common Privet) .
I 00
60
Liriodendron tulipifera (Tulip Tree) . . 1o 75
Locust. See Gleditschia and Robinia.
Maclura aurantiaca (Osage Orange) .
roo lbs., \$30. Io 40
Magnolia acuminata (Cucumber Tree). 20 I 50
Fraseri . . . . . . . . . . . . . . 30300
glauca (Sweet Bay) . . . . . . . . . $20 \quad 200$
grandiflora (Large-flowering) . . . . 20200
hypoleuca. From Japan . . . . . . 404 co
Kobus. From Japan . . . . . . . . 40 macrophylla (Great-leaved Magnolia) 25 250
Maple. See Acer.
Menispermum Canadense (Moonseed) . 35350
Morus alba (White Mulberry) . . . . . 20200
Cedrona . . . . . . . . . . . . 45450
Moretti (Dandolos Mulberry) . . . . 25250
nigra (Black Mulberry) . . . . . . . 20200
Tatarica (Russian Mulberry) . . . . 25250
Mulberry. See Morus.
Myrica
Californica (California Wax Myrtle) . 35350
cerifera (Candleberry Myrtle) . . . . 20200
Myrtus communis . . . . . . . . . . Io
Negundo aceroides (Box Elder) . . . . io
Nyssa multiflora (Sour Gum Tree) . . io sylvatica . . . . . . . . . . . . . . 15
Oreodaphne Californica (Cal. Laurel) . . 15 I 50
Osage Orange. See Maclura.
Paliurus aculeata (Christ's Thorn) . . io 40
Parkinsonia aculeata . . . . . . 25250
Paulownia imperialis (Paulownia) . . . io I oo
Photinia arbutifolia (California Maybush) I5 I 50
Platanus occidentalis (Buttonball) . . . 10
orientalis (Oriental Plane) . . . . . 10
Plum. See Prunus.
Populus tremula . . . . . . . . . . . I5 I 50
Prunus Americana (Wild Plum ) . . . . 20200
lusitanica . . . . . . . . . . . . . Io
maritima (Beach Plum) . . . . . . . 20200
mollis (Oregon Wild Cherry) . . . . 40400
serotina (Wild Black Cherry) . . . . $10 \quad 75$
Virginica (Choke Cherry) . . . . . 15 I 50
Pyrus arbutifolia (Chokeberry) . . . . 20200
rivularis (Oregon Crab Tree) . . . . 50500
Rhamnus alaternus . . . . . . . . . . io I oo Californica . . . . . . . . . . . . 20200 Caroliniana (Alder Buckthorn) . . . I5 I 00 cathartica (Buckthorn) . . . . . . . io 1 co Purshiana. From Washington . . . 30300
Rhododendron Californicum .... I oo maximum (Great Laurel) . . . . . . 60
Rhus
copallina (Dwarf Sumach) . . . . . io 1 oo
cotinus (Smoke Tree) . . . . . . . 20200
glabra (Smooth Sumach) . . . . . io 1 oo
typhina (Staghorn Sumach) . . . . i5 I 50
toxicodendron . . . . . . . . . . 20
venenata (Poison Sumach) . . . . . 15
Ribes lacustre (Swamp Gooseberry) . 60 600 sanguineum (Missouri Currant) . . 30
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80

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75
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600

50
200
50
300

# DECIDUOUS TREE AND SHRUB SEEDS, continued 



## FRUIT SEEDS




## NATIVE GRAPE SEEDS



## SEEDS OF HEDGE PLANTS

For Prices, see under head of Tree Seeds
Arborvitæ, American . . . Thuja occidentalis.
Barberry, Common . . . Berberis vulgaris.
Purple-leaved . . . . Berberis folio-purpurea.
Japanese . . . . . Berberis Thunbergi.
Broom, Scotch . . . . . Genista scoparia.
Buckthorn . . . . . . Rhamnus Catharticus.
Furze, or Gorse . . . . Ulex Europæa.
Hawthorn . . . . . . . Cratægus Oxyacantha.

Hemlock Spruce . . . . . Abies Canadensis.
Locust, Honey . . . . . . Gleditschia triacanthos.
Locust, Yellow . . . . . . Robinia pseudacacia.
Norway Spruce . . . . . Picea excelsa.
Osage Orange . . . . . . Maclura aurantiaca.
Privet, Japan or California. Ligustrum Japonicum.
Common Evergreen . . Ligustrum vulgare.
Sheepberry (Black Haw). Viburnum prunifolium.

## FLOWER SEEDS

Practical Directions for Culture, Treatment, Etc.

HARDY ANNUALS (hA).-Sow in April or May, according to the latitude, in shallow boxes or pots placed in a warm window, a hotbed, or, if possible, in a greenhouse. A second sowing ought to be made trom 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 2 to 3 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. The soil from old hotbeds is excellent, or sodsfrom an old pasture piled up and allowed $t$, rot for two or three years and then mixed with a little old stable-manure and sand. 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-leat they must be transplanted to new boxes. If pots 2 inches or more in diameter can be had, set out from three to a dozen or more of the young seedlings along the edges of the pot, 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. When the pots cannot be had, boxes, tin cans, etc., may be substituted.

A common mistake in sowing flower, as well as other seeds, is 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., 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.

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 coldframes. They will make strong plants by spring and flower early. Do not put on the sashes until heavy rains and frosts begin, and then always remove during the day whenever the temperature is above freezing in winter.

HARDY BIENNIALS (hB) and PERENNIALS (hP).-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 be transplanted to the flower garden where they are to remain. The seeds of some species of hardy perennials often lie in the ground for six or eight months before germinating, so that patience with them is often unexpectedly rewarded.

HALF-HARDY ANNUALS (hhA). -These may be sown in shallow boxes, pots or a hotbed, as directed for Hardy Annuals. They may be sown thus at any time after the middle of April, as the hotbed 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. 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 flowers. 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 hotbed, carefully protecting them from the cold, shading from the midday sun, and watering with a fine rose. The seed should be sown in a very light, sandy compost, and the pots well drained by placing broken pots or bits of sod 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 hotbed 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 ( $\mathbf{g}$ ) 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 leafmould 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 cer-
tain 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, thev 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 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, and watered very sparingly.

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 it to them by dipping a clothes-brush in water, shaking off the greater part from the brush, and then (holding the brush over the seed-pan) drawing the hand over the bristles several times ; this 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 Sinensis.-Sow the seeds in drills in a light, rich soil, in shallow boxes, at any time from the middle of March to the middle of May ; the earliest-sown seed will naturally produce the earliest bloom. Cover the seeds 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 2 - or $21 / 2$-inch pots, using a light, rich soil. The object now is to make good, stocky plants, and they must therefore be repotted as often as the pots become tolerably filled with roots, until they are in 5 - r 6 -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 during summer. The plants will bloom continuously during the winter in either the greenhouse or a well-lighted room not too warm ; they should not be moved about often.

Cineraria.-This is a rather difficult plant to grow 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 Primula Sinensis. 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. Repot 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 repotting should be continued until the plants are in pots from 8 to io inches in diameter. The last two pottings should be liberal ones, and drainage well provided for, as the plants will need copious watering. When the flower-stalks appear, manure water may be used once or twice a week. Aphis and red spider are the chief enemies to be guarded against ; this is best done by frequent syringings 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.

Calceolaria. - The seeds are very small and should be sown on the surface of shallow boxes filled with a light, sandy soil which 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 is best. To retain the moisture the box may be covered with panes of glass which must be removed, however, as soon as the plants appear. The box should have plenty of light but not much sun. As soon as the plants can be handled, transplant singly into pots 2 to $21 / 2$ inches in diameter. The soil should be light and rich, and vegetable mould is an excellent addition. Repot as often as the pots are fairly filled with routs, and continue the repotting, if fine flowers are wanted, till the plants are in 8 -inch pots. If the plants become root-bound they 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, and keep the pots apart to prevent the leaves from touching.

Pansy.-For spring blooming the seed should be sown in August, September and October, in a coldframe with a southern aspect. Plenty of air and light is essential. During mild weather the sashes should be removed; when it is frosty, coverings are preferable to artificial heat. If wanted for winter bloom, sow in July and transplant in beds or benches near the glass in the greenhouse, in a low and even temperature.

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 seeds 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, into small pots in a soil only moderately rich; or, if the seeds 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.

Petunias.-Fill shallow boxes with fine, light soil, say an even mixture of leaf-mould and sand, and wet thoroughly by pouring on boiling water, which kills insects and heats the soil. When the soil has cooled sufficiently, but is still warm, sow the seeds very thinly in the boxes, so that the plants may be I inch apart ; cover the seeds very slightly with sifted sand, and place slate or glass on top of the boxes. If the white root-points of germination appear before the leaves, sift on more sand, replace the slate, and watch closely. When the small leaves appear, remove slate and give plenty of light, to produce stocky plants. The soil may now need water, which should be applied very gently. Later the larger plants may be transplanted into other boxes or pots. As the weakest plants frequently give the finest blossoms, every plant should be preserved until the blossoms appear.


# Selected List of Flower Seeds 

Our complete list of Flower Seeds begins on page 98 ASTER<br>(Half-hardy Annual)

The Aster's vigor and ease of culture are important factors of its popularity. Plants from seed sown in the open ground in May bloom finely in September and October, when the flowers are seen at their best. For July and August flowers, sow in March or April, in coldframe, spent hotbed, or pots or boxes in the house. Cover the seeds about half an inch deep with rich, light soil, and when the plants have three or four leaves transplant about 18 inches apart each way into well-prepared beds. Manures too fresh or used in too large quantities sometimes induce disease in Asters. When used they should be thoroughly well decayed and mixed with the soil. Small quantities of unslaked lime, or of fresh wood ashes, stirred into the surface of the Aster beds, form good tonics for the plants and keep disease and insects from the roots.

DWARF CHRYSANTHEMUM-FLOWERED. The plants grow only about 10 or 12 inches high, but the flowers are large and double like chrysanthemums.
2250 White ..... pkt., Io
2251 Scarlet10
2252 Dark Blue ..... 10
2253 Light Blue ..... IO
2254 Carmine ..... IO
2255 Rose ..... IO
2260 Mixed ..... per oz., \$I.50. Io

TRUFFAUT'S PÆONY PERFECTION. A handsome Aster that grows stiffly erect and about 18 inches tall. The class is remarkable for the brilliant colors of its great incurved flowers.

2265 Amethyst. New, splendid . . . pkt., Io 2266 Snow-White IO 2268 Apple Blossom . . . . . . . . . . Io 2269 Crimson . . . . . . . . . . . . . IO 2270 Rose . . . . . . . . . . . . . . . IO 227 Scarlet . . . . . . . . . . . . . . IO 2273 Light Blue . . . . . . . . . . . . IO 2274 Blood-Red . . . . . . . . . . . . . IO 2279 Mixed . . . . . . . per Oz., \$I.50 . Io
VICTORIA. Plants of this magnificent race bear from 10 to 20 fine, beautifully reflexed flowers in an elegant pyramid about 18 inches high. The best sort for pot culture.

2287 White . . . . . . . . . . . . pkt., IO
2289 Rose
IO
2290 Peach Blossom . . . . . . . . . . Io
229 I Light Blue . . . . . . . . . . . . IO
2292 Dark Blue . . . . . . . . . . . . IO
2293 Dark Scarlet . . . . . . . . . . . Io
2294 Mixed . . . . . . . . per oz., \$2 . io
COMET. This, the most artistic-flowered of all the Asters, has become a fixed type in which specialists are continually developing some new strain. The outer petals are wavily reflexed, centering in a whorl of shorter curled and twisted ones; forms flowers of extraordinary size and beauty.

| 2298 | Rose . . . . . . . . . . . . . plit., io |
| :---: | :---: |
| 2299 | Carmine . . . . . . . . . . . . . 10 |
| 2300 | Light Blue . . . . . . . . . . . . Io |
| 2301 | Dark Blue . . . . . . . . . . . . 10 |
| 2302 | Snow - White . . . . . . . . . . . Io |
| 2303 | Peach Blossom . . . . . . . . . Io |
| 2304 | Crimson . . . . . . . . . . . . . Io |
| 2306 | Mixed . . . . . per oz., \$I.50 . Io |
| 2308 | Giant White . . . . . . . . . . Io |
| 2310 | Rose . . . . . . . . . . 10 |
| 2311 | Light Blue . . . . . . . . . Io |
| 2312 | " Dark Blue . . . . . . . . . Io |
| 2313 | Crimson . . . . . . . . . . Io |
| 2316 | Mixed . . . per oz., \$r.50. Io |
| 2318 | Single White Comet. New. Fine for |

QUEEN OF THE MARKET. The best early Aster, usually in full bloom two weeks before most other sorts begin to blossom. Of graceful, spreading habit. Height, $11 / 2$ feet. 2328 White . . . . . . . . . . . . pkt., 10 2329 Violet-Red . . . . . . . . . . . . 10 2330 Crimson . . . . . . . . . . . . . 10 233 I Scarlet . . . . . . . . . . . . . . 10 2332 Rose . . . . . . . . . . . . . . . 10 2333 Dark Blue . . . . . . . . . . . . . 1 о 2334 Light Blue . . . . . . . . . . . . 10 2335 Mixed . . . . . . . . per oz., 75c. . 10
JAPANESE TASSEL. An unusually distinct and picturesque variety. The flowers are grand in size, and their long petals are so curiously waved and curled as to resemble a Japanese chrysanthemum.

2338 Mixed
. pkt., 10
BALL, or JEWEL. Flowers of this strain are longstemmed, quite round, and therefore especially desirable for cutting or bunching. Dwarf and free-flowering.

2348 White . . . . . . . . . . . . pkt., 10
2349 Apple Blossom . . . . . . . . . . io
2350 Crimson . . . . . . . . . . . . . 10
2351 Dark Blue . . . . . . . . . . . . Io
2352 Light Blue . . . . . . . . . . . . 10
2353 Mixed . . . . . . . per oz., \$I.50 . 10
LADY ASTER. An exquisite Aster, distinguished for its profuse bloom, graceful habit and peculiar, straightedged leaves. Each plant produces 40 or more buds.

2356 Pure White (Lady in White) . . pkt., Io
TRIUMPH. The rich, heavy flowers are elegantly incurved, and have a wonderful depth and brilliancy of color. Height, 10 to 12 inches.

$$
2362 \text { Scarlet }
$$

. pkt., г
BRANCHING. This vigorous type forms broad, handsome bushes, covered with large, long-stemmed and long-petaled flowers that are graceful and feathery in effect. 2364 Crimson pkt., 10
2365 Pink IO
2366 White . . . . . . . . . . . . . . . . . . . .
2367 Purple . . . . . . . . . . . . . . ro
2368 Lavender . . . . . . . . . . . . . IO
2369 Mixed . . . . . . per oz., \$I . Io
2370 Branching Comet, White . . . . . . Io
237 I " " " Pink . . . . . . IO
2372 " $"$ Carmine . . . . . Io
2373 " " Blue and White . io
2374 " " " Crimson . . . . . Io
2375 " $\quad$ M Mixed. . oz., \$I . Io
VARIOUS ASTERS-
2376 Empress Frederick. Splendid pure white, extra large flowers ; best of all for pots

25
$\begin{array}{lll}2378 & \text { Ostrich Plume. } \\ 2379 & \text { Pure white } \\ \text { Rose . . . . . . . . } & 10 \\ \text {. }\end{array}$

VARIOUS ASTERS, continued

| 2380 | Hohenzollern, White . . . . . . |
| :--- | :--- |
| 2381 | Rose . . . . . . |
| 2384 | Mignon. Pure white |
| 2385 | Ray, White. Very fine . . . . . |
| 2386 | Snowball. Pure white . . . . |

ASTER, continued
pkt., 10
10
10

- 10

10

COLLECTIONS OF CHOICE ASTERS
These collections are put up by the famous German Aster-growers, and they contain only seed saved from the very finest plants. In each collection the colors are separate, the coliection of 24 Victoria Prize, for instance, containing one packet each of 24 separate and distinct colors of that class.


## AGERATUM

For strengthening the garden's color forces in blue, no annual is so good as the Ageratum, which shows some exquisite and unusual shades of this color. Though ordinarily used in bedding and borders in contrast with such plants as geraniums, perillas, amarantus, etc., the rose, white and blue sorts are all exceedingly attractive when mingled with alyssum, candytuft and similar plants. They grow so well almost anywhere that many combinations are possible for them. The plants are neat, bushy and erect, with a continual profuse clustering of pretty brush-like flowers throughout the season. The dwarf blue sorts make fine borders. Sow under glass early in the season or, later, outdoors in a meliow seed-bed Seeds sown in August will produce good plants for winter flowering.

$$
2420 \text { conspicuum. This and the next are } \quad \text { tender perennials ; sow early; flow- }
$$

2422 Lasseauxi. Rose-colored clusters; Ift. 5


2424 Mexicanum (hA). Parent stock of the hardy annuals below; flowers blue ; $11 / 2 \mathrm{ft}$. . . . . . . . . oz., 40 c. . pkt., 5
2425 " album. White; 1 t/2 ft. . . . . . . . . . . . . . . . . . . . . . oz., 50c. . 5
2426 " Dwarf Blue. Extra neat ; 9 in.; fine for edgings ......... "60c. . 5
2427 " Dwarf White. Pretty for contrast; 9 in.; fine for edgings ...... " 6oc. . 5
2428 " Little Dorrit. Six inches high, i foot across; flowers azure-blue . . " 75 c. . io
2430 " Swanley Blue. A fine new large-flowered sort; ift. . . . . . . . " 75C. . 10
2431 " Blue Perfection. Very fine dwarf; new . . . . . . . . . . . . . . " 75c. . io
2434 " Mixed. All annual varieties . . . . . . . . . . . . . . . . . . . " 40c. . 5

## ALYSSUM

For borders, edgings, baskets, pots, rockwork and for cutting, we recommend a liberal use of this dainty little flower. In borders sow thickly so as to form masses, and quite early in spring or even the previous autumn. For winter bloom sow late in August, and thin the seedlings to about a dozen for a good-sized basket. Cut back after the first flowers fade, and others will come.

[^2]
# AQUILEGIA (Columbine) 

(Hardy Perennials)

A most desirable border plant in all its many varieties. It forms large clumps, blooms early, long and abundantly, is quite hardy, useful for cutting and elegant in habit. Sow seed in the open ground in spring, preferably where the plants are to grow, and thin to about a foot apart. They may also be sown in the fall for flowering the following season. They thrive well with ordinary garden culture, but such rare sorts as $A$. ccerulea and $A$. chrysantha do best in partially shaded, well-drained nooks. Few hardy perennials are so easily grown from seed.
2456 caryophylloides. Oddly striped with red and white ; $\mathrm{I}^{1 / 2} \mathrm{ft}$. ..... pkt., 25
2457 Veitch's New Hybrids. Comprises many new and beautiful combinations ..... 50
2458 chrysantha. Flowers large, long-spurred, canary-colored; 3 ft . ..... Io
2459 clematidea hybrida. A most beautiful new hybrid. Single and double mixed in greatdiversity of form and color25
2460 cœrulea (Rocky Mountain Blue Columbine). One of the most beautiful of our nativeAmerican flowers. Sepals deep blue, petals white; 3 ft .25
2461 " hybrida. Large-flowered, long-spurred new hybrid ..... 25
flabellata nana alba. White flowers; very early ; ift. ..... Io
2465 glandulosa vera. Large, erect blue flowers, with pure white corolla; a splendid flower ..... 25
2468 truncata. Dwarf, scarlet and yellow ; I ft. ..... 10
2470 Skinneri (Mexican Columbine). Very handsome and quite distinct; spurs and sepalslong, crimson and light green ; 3 ft .25
2472 vulgaris, Double White. Showy and lasting ; 2 ft . ..... 5
2473 " "" Mixed. Best colors . . . . . . . . . . . . . . . . . . per oz., zoc. . ..... 5
2474  ..... 5
Collection of Aquilegia, including 12 choice varieties ..... 50
BALSAM
(Impatiens Balsamina. hhA)

A native of India, the garden Balsam loves hot sun, rich soil and plenty of water. The young plants are quick, sure growers, and from seed sown in the open ground in May soon form handsome bushes thickly massed with large, rosé-like flowers. Transplanting two or three times has a tendency to dwarf the plants into better shape and to make the flowers more double. Balsams are not often given room for perfect development ; they will easily cover 12 to 18 inches of space each way. For the finest flowers choice seed is more than usually essential, for cultivation and selection have wrought wonders with this plant. We offer only the finest double sorts.



## CALENDULA

Hardy annuals about a foot high. The seed may be sown in the open ground quite early in spring. and the plants will be in bloom early in summer, and continue until late in the autumn. The flowers exhibit every shade of yellow from ivory to deep orange, are produced in great profusion, and are strongly effective in beds, borders or backgrounds. The dried flowers are sometimes used for flavoring soups and stews. The first eight varieties are all very double.

[^3]

NEW LARGE-FLOWERING JAPAN IRIS (See page 130)

## CALLIOPSIS (Coreopsis)

This is another of the garden's great forces in yellow, strengthened with rich red maroons and browns. Sow in the open ground in spring, and in thinning or transplanting give the plants plenty of room to spread. Their tall, slender habit makes neat staking and tying necessary. All are fine for cutting, especially C. grandiflora and C. lanceolata.

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2550 marmorata (hA). Maroon and gold; 11/ ft. . . . . . . . . . . . . per oz., 30c. . . pkt., 5
2552 cardaminifolia (hA). Red and yellow ; I1/2 ft. . . . . . . . . . . . . . per oz., 30c. . . 5
2 5 5 3 \text { Drummondii (Golden Wave) (hA). Gold and brown ; I ft. . . . . . . . " 30c. . . 5}
2554 elegans picta (hA). Yellow and brown ; 2 ft. . . . . . . . . . . . . . . " 30c. . . 5
2560 grandiflora (hP). Large flowers of rich yellow; 2 ft. . . . . . . . . . . . . . . . . . . ro
2562 lanceolata (hP). Yellow, with brown eye. One of the best yellow flowers for cutting . oz., 75c. . Io
2563 California Sunbeams (hP). Flowers very large, in a great variety of beautiful forms and
        various shades of yellow and brown; ift.Iо
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2566 Mixed Annual Sorts ..... 5

## CAMPANULA

(Canterbury Bell)
These fine old plants are rich in color, profuse in bloom, and of easy culture. For outdoor effects, when planted in quantity, they are glorious, and finest full-bloom specimens of such varieties as $C$. calycanthema can be transplanted to pots for house decoration by soaking the soil about them with water and lifting with a ball of earth. Sow seed of biennials outdoors early in July and thin or transplant to temporary quarters until October. Transplant, then, 6 or 8 inches apart, in a coldframe, where they will make large plants by spring and are as easily cared for as pansies. The old practice of covering Canterbury Bells with leaves through winter is not satisfactory. Transplant in spring, 18 to 20 inches apart in beds where they are to bloom. In June and July they flower most profusely, and are in fine form a long time. They also make beautiful pot-plants for Easter. If sown early in good soil the hardy perennials will bloom early the next year. All varieties like a rich, sandy soil, with good drainage.

| 2575 | Carpatica (hP). Deep blue ; 6 in. For rockeries, borders, beds and edgings . oz., 5oc. . pkt., |
| :---: | :---: |
| 2576 | alba. Flowers white ; 6 in. . . . . . . . . . . . . . . . . . . " 60 c . |
| 2578 | Mixed. Dwarf sorts . . . . . . . . . . . . . . . . . . . . . . " 50 c . |
| 2582 | Medium Blue (Canterbury Bell) (hB . Blooms first year if sown early ; 2 ft . . "30c. |
| 2583 | " White. Pretty for contrasts . . . . . . . . . . . . . . . . . . . " 40 c |
| 2584 | Rose . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . " 40 ¢ |
| 2585 | Striped. Very fine . . . . . . . . . . . . . . . . . . . . . . . ${ }^{\text {c }} 50 \mathrm{c}$ |
| 2586 | Mixed . . . . . . . . . . . . . . . . . . . . . . . . . . . . . " 30 c |
| 2588 | Double Blue. Rich, heavy curious flowers, through summer and fall . . . . . . io |
| 2589 | " White. Of waxen appearance |
| 2590 | " Rose |
| 2592 | " Mixed |
| 2598 | calycanthema ( Cup and Saucer) (hB). Handsome blue flowers; symmetrical in growth ; often has 35 to 40 large flowers open at the same time on a singie plant. Beautiful for pots or borders. Hardy biennial ; 2 ft . |
| 2599 | calycanthema alba. A white-flowered variety of the above |
| 2602 | " Mixed. Shades of blue and white |
| 2604 | " Prize Mixture of all colors, Medium, Calycanthema, Single and Double . oz., |
| 2606 | macrostyla. Large, lovely violet flowers ; 3 ft . Hardy annual |
| 2607 | Loreyi, Blue. Very pretty hardy annual |
| 2608 | nobilis alba. White, semi-double ; $21 / 2 \mathrm{ft}$. ; June. Hardy biennial |
| 2610 | persicifolia grandiflora, Blue 'hP). Hardy perennials, with superb large flowers; for finest effects plant the blue and white varieties together ; 2 to 4 ft . June and July . 25 |
| 26 II | grandiflora alba. A white-flowered variety of the above . . . . . . . . . . . 25 |
| 2612 | " Fine Mixed. Very showy . . . . . . . . . . . . . . . . . . . . 10 |
| 2614 | Pyramidalis (Chimney Bellfower) (hP). Spikes 3 to 4 ft . tall, erect, pyramidal ; flowers |
| 2615 | large and of a beautiful blue; blooms in late summer and autumn . . . . 5 <br> alba. A white-flowered variety of the above . |
| 2618 | Vidali (gP). White, very floriferous ; tender perennial ; 2 ft . . . . . . . . . . . . . 10 |
|  | Collection of Campanulas, including 12 vars. choicest sorts . . . . . . . . . . . . . . 60 |

## CANDYTUFT

(Iberis)
The Candytufts are among our best white flowers for edgings, for bedding or massing, for rockeries and for cutting. Several of the varieties are fragrant, and all are profuse in bloom. Sow outdoors in April, where they are to bloom, and thin well when the plants grow about an inch. Sow again in a month, and late in July for fall flowers. Give rich soil and water freely.


CAMPANULA (See preceding page)
CANDYTUFT, continued
2624 affinis, Dwarf (hA). Neat and pretty bedder ; 6 in. per oz., 25c. . pkt. ..... 5
2625 amara (hA). White; Ift. ..... 5
2626 coronaria (Rocket Candytuft) (hA). Of candelabra form; flowers in upright spikes . oz., 20c. . ..... 5
2627 " Empress. Especially attractive; ift ..... 5
2628 " Little Prince. Very large heads of pure white flowers. Fine for borders and pots; 6 in. ..... 10
2632 odorata (hA). Small white fragrant flowers per oz., 20c. . ..... 5
2634 umbellata (hA). Purple-flowered; $\mathbf{I f t}_{\text {carnea. }} \mathrm{ft}$. ..... 25c. .
40c. .
Dunnetti. Dark crimson; ift. ..... 25c. .
2636 Dunnetti. Dark crimson ; ift. ..... 5lilacina. Lilac; ift.25C. .
2638 " carminea. Bright carmine ; 1 ft.
2642 " Dwarf Hybrids. Mixed colors. Neat and pretty, and long in bloom; 6 in. 50 c . ..... 5
555
2640 " Queen of Italy. New, dwarf, erect ; fine pink flowers ; 6 in. ..... 4oc. . 5 ..... 4oc. . 52648 Mixed Annual Sorts$20 c$.
PERENNIAL CANDYTUFTS. These are shrubby, hardy, evergreen plants, and make a magnificent showing the second year from seed. They bloom very early, cushioning rock ledges, borders, or unsightly, rough spaces with banks of bloom. Sow outdoors either in spring or fall in any sunny place.
2656 sempervirens. The white flowers remain fresh nearly a month ; ift.
5
2658 Gibraltarica. Beautiful blush-white ; 1 ft . ..... 10
Collection of Candytuft, including 6 vars. choicest annual sorts ..... 30

## CARNATION <br> (Dianthus caryophyllus)

The splendid Carnation of the florist is a very interesting plant to grow from seed, and it is not over-exacting. Sown under glass in early spring, or later in the open ground, the plants will flower finely the second summer. For largest, richest flowers we recommend their culture in pots of rich soil, but with many they are also garden favorites, and grown in this way flowers of good quality may be enjoyed all summer if given plenty of water, good soil and a mulch about their roots. W'ith tall varieties neat staking and tying is also necessary. Young plants are perfectly hardy outdoors, but when two or three years old they are injured by winter cold, so that sowing should be made every year.

MARGARET CARNATIONS are an extra-vigorous race especially adapted for outdoor culture. They are very neat in habit, and remarkable for their rich profusion of flowers, produced in five months from sowing. For masses of bloom few plants are finer; and for pots, also, their neat habit makes them very suitable. Grown as annuals, from seed sown every spring, they are most satisfactory. Our seed of these varieties is grown exclusively by Mr. Chabaud, in the famous

Garden of Carnations, Provence, France.
2670 Margaret, Double White. Large, perfect flowers; $11 / 2 \mathrm{ft}$. ..... - pkt., 10 2672 "، Yellow. A clear, soft shade ; i $1 / 2 \mathrm{ft}$. ..... 25
2673 " " " Tall Mixed. 2 ft . . . . . . . . . . . . . . . . . . per oz., \$1.50 ..... Io
2674 "، "، Half Dwarf Mixed. 1 1/2 ft. ..... Io
2675 Giant Margaret. Extra-large and perfect-flowering, in a rich variety of colors, including yellow ; 8J per cent of the flowers come double ; 1 ft . ..... 25
PERPETUAL CARNATIONS. This race has large, elegantly formed flowers, continually abloomupon closely branched, symmetrical plants, often called, from their neat habit, "Tree Carnations."
2686 Chabaud Perpetual, Double. Mixed, yellow, red, white, etc.; $11 / 2 \mathrm{ft}$. Blooms in 7 months ..... 25
2687 Dwarf Perpetual (à tige de fer). I ft. ..... 50
2688 Marie Chabaud. Pure canary-yellow; the most beautiful and most fragrant yellow ..... 50
2689 Comtesse de Paris. Very dwarf; yellow; comes true from seed ..... 50
2690 Jeanne Dionis. Enormous flowers of the purest white color and most perfect form ..... 50
2691 Mme. B. Chabaud. Flowers yellow, shading to salmon and bright cherry-red ..... 50
2692 Sparkling (Etincelant). Bright glittering red of surpassing richness ..... 50
2693 Giant Perpetual White. Very large, perfectly double; flowers in seven months after sowing. ..... 50
2694 " " Yellow. Eighty per cent come true to color ; creamy to golden yellow ..... 50
2696 " " Fine Mixed. Enormous flowers, perfectly double; splendid colors ..... 50
2698 Rose-leaved, Mixed. Round petals; 2 ft . ..... 50
BORDER CARNATIONS, ETC. We invite attention to the splendid collections below. 2704 Red Grenadine, Double. Brilliant scarlet ; 2 ft . ..... 25
$27 \cap 5$ Enfant de Nice (Improved Giant-flowered). All colors. Flowers in six months from seed. ..... 50
2706 Early Dwarf Vienna. Fine for garden culture and for cutting; $\mathbf{r} \mathrm{ft}$. ..... Io
2708 Fine Double Mixed. Many colors; 2 ft . ..... 10
2710 Double Mixed ..... 5
2712 Ordinary Mixed 75c. . ..... 5
CHOICE COLLECTIONS OF CARNATIONS



## CENTAUREA (Cornflower)

C. Cyamus is also known as "Blue Bottle," "Ragged Sailor," "Kaiser Blumen," and sometimes as "Bachelor's Button." These are bright-flowered plants of hardiest nature and simplest culture, yet esteemed among the most attractive and graceful of all the oldfashioned flowers. When placed in water the flowers increase in size.

PERENNIAL FLOWERING. A dry, sandy soil of moderate fertility seems to suit them best.

2724 macrocephala. Flower-heads large, showy, bright yellow ; 3 ft. . . pkt., IO
PERENNIAL SILVER-LEAVED. These are used for borders or edgings, and thrive anywhere. Flowers white, leaves grayish; height Ift.; half-hardy.

## 2732 candidissima

i,ooo seeds, \$I . pkt., io 2733 Clementei
per 1,000 seeds, 50c. . Io 2734 gymnocarpa.oz., 8oc. IO
HARDY ANNUALS. These flower finest in full sun and thin soil. Sow in the open ground in spring.

> 2735 Americana. Flowers lilac-purple; $3 \mathrm{ft}.$. per oz., 4oc. pkt., 5

2738 Margaritæ Pure white, $21 / 2$ inches across, exquisitely laciniated and delightfully scented; forms stocky, wellbudded little bushes. A garden treasure ; $11 / 2 \mathrm{ft}$. .
$2739 \begin{gathered}\text { moschata, See Sweet } \\ \text { Sultan, in General }\end{gathered}$
 List.
2740 suaveolens (Yellow Sweet Sultan). Fine
centaurea New ; very largeflowered hardy class
dorata Chameleon. Yellow and rose; fragrant ; superb . 10 wher $2^{1 / 2}$ inctes

2741 Cyanus (Blue Cornflozer). Sow plentifully in large, irregular beds; $11 / 2 \mathrm{ft}$. . per oz., 25c. . 5
2742 " Emperor William. Rich dark blue ; $11 / \mathrm{ft}$. . . . . . . . . . . . . " ${ }^{25}$ C. .
2744 " Victoria, Dwarf Compact. Only 9 inches high ; for pots and edgings; azure-blue . ıо
2746 " nana compacta hybrida. Another charming dwarf. All colors mixed; 9 in. . . . 1 о
2748 " Mixed . . . . . . . . . . . . . . . . . . . . . . . . . . . per oz., 25c. . 5
2750 " Double Mixed. Odd and pretty . . . . . . . . . . . . . . . . . . . . . . . . 5
Collection of Centaurea, including 6 varieties of C. Cyanus (Cornflower) ........ 30

## CHRYSANTHEMUMS

The Annual Chrysanthemums bloom profusely from early summer until frost, and when grown in large beds or masses their bright colors make a splendid show. The plants can be brought into bloom early by sowing the seed in frames or window-boxes, and afterwards transplanting to the garden ; or seed may be sown where the plants are to flower, if the seedlings are thinned to 8 or to inches apart. A little pinching back in early growth makes the plants bushy and shapely. Average height, $\mathrm{I}^{\text {to } 11 / 2 \mathrm{ft} \text {. }}$


CHRYSANTHEMUMS, continued


## PERENNIAL CHRYSANTHEMLMS

This section includes the splendid, large-flowered sorts of the autumn shows, and also the pretty, hardy pompons that make bright masses of color in our gardens long after heavy frosts have cut down other flowers. We wish to make quite clear the distinction between this class and the Annual Chrysanthemums, described above, that, as has sometimes happened heretofore, customers may not order seed of the summer-blooming garden varieties, expecting them to yield the grand show flowers of late fall. The great blooms of the exhibitions are obtained from cuttings carefully cultivated. For ordinary culture and room decoration, plants pinched back to form a number of branches and holding from 15 to 20 flowers will be found satisfactory. Average height of show kinds, 3 feet.

2810 Indicum grandiflorum. Will produce superb flowers of different types and colors . . . pkt., io
2811 Japonicum. Japanese varieties; globe-shaped, incurved, grandly double . . . . . . . . io
2812 " From Finest Flowers. An extra-choice mixture, giving flowers of the finest types. 25
2813 " Pompon. The pretty hardy dwarfs, with bright, clustered flowers ; $11 / 2 \mathrm{ft}$. . io
${ }_{2815}$ " "California Fantasies." A superb mixture, containing a wonderful variety of the most beautiful æsthetic and fantastic forms 25

## CLARKIA

These are among the prettiest native hardy annuals that come to us from beyond the Rocky Mountains. They bloom so freely and have flowers of such various bright colors that a bed of them in full bloom is a very beautiful sight. They are useful, too, for hanging baskets, for vases and as edging plants. Sow outdoors in early spring and grow in partial shade. They bloom through midsummer to late autumn Average height, $1 / 2 \mathrm{ft}$.


## COCKSCOMB

(Celosia cristata. hhA)
We prize and plant the Cockscombs as an odd and picturesque decorative feature of the garden. The bright red and crimson varieties are most effective, both in gardens and in winter bouquets, for which they are cut before fully ripe and dried in the house. The dwarf varieties make novel and attractive borders; the tall ones form striking groups. Transplanting into rich soil about the time the combs begin to form makes these flower-heads much larger. They are bright from midsummer until frost.

[^4]
## COCKSCOMB, continued

2848 All-Aglow. Large, fiery scarlet combs; quite dwarf ..... 25
2850 Queen of Dwarfs. Six or 8 inches tall, with ruby heads almost as broad ..... Io
2852 Glasgow Prize. Dark leaves and crimson combs; ift. ..... 10
2854 Dwarf Large Crimson. A superb new sort,
son. A good plant for exhibition; 6 in.10
2856 Dwarf Fiery Scarlet. A miniature plant, with enormous combs of intense fiery red. New,and a splendid sort10
2857 Japan Crimson. The huge combs are much cut and beruffled; 3 ft ..... Io
2860 Mixed. Large comb sorts per oz., \$I .5

## COSMOS

This is now one of the notable fall flowers, the specialist's skill having recently added much to its beauty. A strong, tall-growing annual, its bold flowers have yet an exquisite daintiness and airiness, heightened in effect by their foliage-setting of feathery green. It is most effective when planted in broad masses, or long background borders against ever-


DELPHINIUM greens or fences at some little distance from the house and the garden walks. From seed started early in the house or frame the plants will be 3 or 4 feet high by July, and tossing into the air a perfect storm of bright-colored, daisylike flowers, fine for cutting. If topped when half-grown the plants will bloom much earlier, the check seeming to induce immediate flowering. We offer only the choice large-flowering strains.

2870 Titania. A new chrysanthemum-flowered Cosmos with snow-white semi-double flowers over 2 inches in diameter. Petals irregularly laciniated
Giant Fancy. Flowers often 5 inches wide, and with the petals beautifully fringed.

| 2872 | " | " | White . . . . . . . . . . . . . |
| :--- | :--- | :--- | :--- |
| 2873 | I |  |  |
| 2874 | " | " | Pink. Bright clear shades . . . . |
| 2875 | " | " |  |
| 28 | Mixed. All shades from pure |  |  |

8 white to deep crimson ... . Io
2878 Tints of Dawn. Of compact, bushy growth, early flowering. The handsome white circular flowers are delicately flushed with rose around the center
2880 Marguerite. Petals deeply and irregularly fringed; in various bright colors; exquisitely pretty . I5
2883 Mammoth Perfection, Rosita. Pink . . . . . Io
2884 " " Erlinda. White . . . . Io
2886 " " Conchita. Crimson . . . Io
2887 Yellow. A distinct shade; blooms early and all season; 2 ft .
2888 Klondyke. Orange-colored . . . . . . . . . IO
2890 White Pearl. Dainty and transparent . oz., 40c. . 5
2891 Pink Pearl . . . . . . . . . . . . " 40 c . .
2893 Early Flowering, Mixed . . . . . . " 40 c . .
2894 Mixed

(77)

## DELPHINIUM, continued

cutting away withered flower-stems. They are sometimes increased by division, but are much more robust when grown from seed. All varieties are easily cultivated and adaptable to many conditions, but in a soil deeply dug and well enriched with fine old manure their blooms are the finest. They must have plenty of room to grow ; $11 / 2$ to 2 feet each way is not too much for the taller sorts.

| pink, br season | ARIETIES. These include the Rocket and Hyacinth-flowered, so called from their long, er-spikes. They bloom best in a rather cool, moist soil. Sow seed in the open border, either in spring or fall, <br>  art, according to variety. The shades of color include light, dark and azure-blue, white, ,buff, rose, apple-blossom, and ed, red-lilac, dark liac, violet and fawn. The varieties are seldom kept separate, as they are quite as pretty and or cutting when sown in mixture. Some of these are really hardy biennials, but because they bloom the first eat them as hardy annuals. |
| :---: | :---: |
| 2904 | Ajacis Dwarf Rocket. Finest colors ; beautiful for bedding ; |
| 2905 | " Tall Rocket. Long, showy spikes ; 2 ft . . . . . . . . . . . . " 30 |
| 2906 | Ranunculus-flowered. Dou |
| 2908 | " Tall Branching. Choice mix |
| 2910 | diopetalum. Beautiful blue flowers; $\mathrm{Ift}$. . . . . . . . . . . . . . per oz |
| 2912 | Emperor, Branching Rose. This and the next are splendidly bright and showy, often showing 40 or 50 erect spikes of flowers ; 2 ft . . . . . per oz., 60 c . . . . |
| 2913 | hite. Beautiful for cutting |
| 2914 | New Rose-colored. Very beautiful and free-flowering. If sown outdoor bloom by first of August ; 2 ft . |
| PERENN | VARIETIES. These are usually taller than |
|  | If sown in fall or very early in spring nearly all will bloom the first season. The foliage is cle and neat ; flower-spikes long and dazzling. |
| 2918 | Barlowi. Large, dark blue flowers ; extra |
| 29 | Brunonianum. Lovely blue, musk-scen |
| 2921 | cardinale. Orange-scarlet. A Californi |
| 2922 | Cashmerianum. Spreading, many-branched ; flowers often 2 in . wide; deep purplish blue; superb; 3 ft . |
| 2924 | Chinese Mixed ( C. grandiflorum). The stems have many lateral branches, gracefully set with large flowers ranging from pure white to deep indigo-blue, the paler colors being especially admired. Young seedlings will bloom from midsummer until frost; 2 ft . |
| 2926 | elatum, Blue (Bee Larkspur). Soft, clear blue flowers in tall spikes ; 3 ft . " 50 |
| 2927 | hybridum, Finest Mixed. Very showy. . . . . . . . . . . . . " ${ }^{\circ} \mathrm{C}$ |
| 2929 | formosum. Brilliant blue, white center ; especially fine and attractive; 3 ft . "" 75c. . . Io |
| 2930 | hybridum fl. pl. Finest double sorts in choice colors ; a superb mixture ; |
| 2933 | nudicaule. The most brilliant species of all, and the only pure bright scarlet. Dwarf and compact in growth, with flower stems of fine length; rft . A native of California |
|  | Zalil (sulphureum). Very beautiful hardy perennial, with long spikes of yellow |

## CHOICE COLLECTIONS OF DELPHINIUMS

| 12 varieties | Dwarf Rocke | \$0 50 | 6 varieties | Emperor . . . | . \$0 35 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6 " | ، ${ }^{\text {، }}$ | 30 | 6 " | Ranunculus-flowered | - 30 |
| 12 " | Tall Rocket | 50 | 8 " | Tall Branching . | 35 |
| 6 | " " . . . | 30 | 6 | "، ، | 25 |
| 6 " | Dwarf Candelabra | 35 | 6 | Hybridum, Finest Double | 75 |

## ESCHSCHOLTZIA

(California Poppy)
The state flower of California. An annual incomparably bright and rich in its pure tints of yellow and orange. The plants average about a foot in height, have beautiful silvery foliage, and produce their large, poppy-like flowers quite lavishly from early spring until frost. They are most effective when grown in beds of considerable size, over which the seed may be sown broadcast thinly and lightly raked in. These sowings may be made early in spring or late in autumn, for earlier germination and bloom the next spring. Also very useful as a pot-plant and for cut-flowers.

| 2 | Californica. True California Poppy. Rich yellow . . . . . . . . . . per oz., 4oc. . pkt., |
| :---: | :---: |
| 2943 | " alba. Creamy white . . . . . . . . . . . . . . . . . . " 400 |
| 2944 | Rose Cardinal. Intense carmine |
| 2945 | canaliculata rosea. New ; most beautiful |
| 2946 | crocea. Pure deep orange . . . . . . . . . . . . . . . . . . . . . . . per oz., 40 oc. |
| 2947 | " Double Orange . . . . . . . . . . . . . . . . . . . . . . . . " 75c. |
| 2948 | Double White |
| 2950 | Golden West. A superb new variety, with very large flower |
| 2951 | Douglasii. Very pretty new yellow variety from California |
| 2952 | tenuifolia. Bright yellow; leaves dense and finely cut ; I |
| 2954 | maritima. Canary-yellow, with orange center ; leaves grayish and beautifully cut |
| 2955 | Mandarin. Red-gold flowers, orange within and scarlet without . . . . per oz., 50c. |
| 2960 | Mixed . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ${ }^{6}{ }^{\text {c }}$ |

These daintily elegant little flowers are hardy perennials that love cool, moist soils, and, like pansies, bloom most freely in fall and early spring. They make beautiful close borders, or edgings, thickly sprinkled with pretty flower-sprays, and will bloom nicely in winter in a cool room or coldframe. Once at home in a garden they establish themselves by self-seeding. All the varieties are general favorites. Sow in spring in a warm, sunny border. Most varieties bloom freely the first season and profusely the second. Average height, 6 inches.

| 2970 | Myosotis alpestris. | A pretty trailer, with blue flowers . . . . . . . per oz., 75c. . pk |
| :---: | :---: | :---: |
| 2971 |  | rosea. Rosy flowers; a pretty contrast for blue and white varieties. |
| 2972 | " ${ }^{\text {a }}$ | alba. White ; especially pretty . . . . . . . . . . . per oz., goc. |
| 2973 | " " | elegantissima. Blue; leaves white-edged; very attractive |
| 2974 | " " | nana cœrulea. Very dwarf, compact ; sky-blue |
| 2975 | ، " | robusta grandiflora (Eliza Fonrobert). Grown extensively for cutting. Florets large, sky-blue, with yellow eye, in large clusters |
| 2976 | " " | Victoria. Symmetrical and strong-growing; dwarf habit; flowers large, globular, sky-blue, abundant; fine for pots and cutting |
| 2977 | " " | stricta. The new pillar-shaped sky-blue ; most beautiful |
| 2979 | " " | Mixed . . . . . . . . . . . . . . . . . . . . . . per oz., 75c. |
| 2982 | Azorica. | Dark blue, with white eye ; 1 ft. . . . . . . . . . . . . . . . . . . . 25 |
| 2983 | " " | cœlestina. Beautiful light blue ; r ft. . . . . . . . . . . . . . . . . . 25 |
| 2985 | " dissitiflor | . Blooms very sarly ; flowers blue. From Switzerland |
| 2987 | " palustris | (True Forget-me-not). Blooms the second year abundantly all season |
| 2989 | sylvatica. |  |

## FOXGLOVE

## (Digitalis)

The tall flower-stems of the Foxgloves are particularly handsome when seen growing among shrubbery, or in bold masses along walks or drives. Used as a background for lower plants they are also very fine. Often the spikes are 2 or 3 feet long and thickly strung with scores of showy, thimble-shaped flowers. Some new sorts rival gloxinias in shadings and markings. Seed may be sown outdoors in spring and the seedlings transplanted where they are to grow, or, preferably, to a coldframe, where they make extra-strong plants, that will flower in magnificent spikes the next season. They are most satisfactory when treated as biennials, sowing the seed every year in rich deep soil and partial shade. Average height, 2 to 3 feet. Easily cultivated. When the center spike begins to fade it should be cut out and the side shoots will, in consequence, grow more vigorously.
2998 Purple (Common Foxglove). Best known per oz., 3oc. . . pkt., ..... 5
3000 White. Fine and attractive ..... 5
3001 Large-flowered. Long racemes of large, bell-shaped yellow blossoms ..... 5
3002 Rose. ..... 5
3005 Mixed per oz., $30 c$ ..... 5
Digitalis gloxinioides. This is a very handsome strain, with long, thick spikes of large flowers in a beautiful variety of colors. The name refers to the gloxinia-like spottedthroats of the class.
3008 gloxinioides, White. Very handsome ; beautiful for cutting ..... 5
3009 "، Purple ..... 5 ..... 5
3010 "" Rose. Bright and showy
3010 "" Rose. Bright and showy
3012 Mixed. All the choice colors ..... 5
3015 maculata superba. Splendid spotted new strain ..... 5
3017 ..... Io
monstrosa, Splendid Mixed. Very large, bell-shaped
Choice Collections, including 12 varieties of Foxglove
monstrosa, Splendid Mixed. Very large, bell-shaped
Choice Collections, including 12 varieties of Foxglove ..... 40

## GODETIA

Choice, free-blooming annuals, with widely opened flowers of satiny texture and of the most delicate and lovely colors. They are beautiful for solid beds, border lines, for pots, and to grow in shaded places, where so few really fine flowers will flourish. Sow seed in the open border in spring, or in a coldframe, and transplant seedlings to stand about a foot apart in rather thin soil. Average height, $11 / 2$ feet.
3026 Rosamond. A splendid new sort ; large glossy pink flowers ..... pkt., 5
3028 Princess of Wales. Dark crimson ..... 5
3029 Lady Satin Rose. Bright carmine; very effective ..... 5
3030 Fairy Queen. Large white flowers, with carmine spots ..... 5
3032 gloriosa. Darkest red; dwarf and compact ..... 5
jo33 grandiflora maculata. Great white flowers, blotched with carmine ..... 5
3035 White Pearl. Beautiful glossy white flowers ..... 5

GODETIA, continued
3036 The Bride. White, with blush spots ..... 5 ..... 5
3038 Duchess of Albany. Satiny white
3038 Duchess of Albany. Satiny white
3039 Lady Albemarle. Dark crimson ..... 5
3040 Lindleyana. White and red ; ift. ..... 5
3042 Bijou. Of dwarf, bushy habit ; lovely blush color ..... 5
3044 Whitneyi. Compact, with superb rosy flowers blotched with crimson; elegant pot-plant ..... 5
3046 " Brilliant. Carmine ; very showy ..... 5
3052 Mixed per oz., 30c. . ..... 5
Collection of Godetias, including 6 choice varieties ..... 30

# HOLLYHOCK <br> (Althea rosea) 

These stately, old-fashoned perennials are most striking when seen in groups or long rows against evergreen hedges, shrubbery, etc., and, in their turn, form a very fine background for plants of lower growth. Their color-variety is wonderful, ranging from pure white through almost every conceivable shade of yellow, red and rose to ashen gray and almost black. Although Hollyhocks are very permanent and hardy for the first winter, it is advisable to sow seed every year, as the flowers on young, vigorous plants are much finer than old ones. Sowings should be made in April or May, and not later than June, to flower the next year. In final transplanting, give each seedling a foot or more space each way for development. Average height, 4 feet. Our seed is of magnificent double varieties grown from Chater's celebrated collection, which has revolutionized the popular estimation of the Hollyhock.

|  | Bright Pink | per oz., | 10 | 3069 | Flesh-Colored |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Canary-Yellow |  | \$2... 10 | 3070 | Salmon |  |  |
| 3061 | Blood-Red |  | \$2. . . 10 | 3071 | Scarl |  |  |
| 3062 | Crimson |  | \$2 | 3072 | Snow-White |  |  |
| 3063 | Golde | " | \$2 |  | Mixed Allegheny |  |  |
| 3064 | Lilac |  | \$2. . . 10 | 3075 | Mixed | er oz., |  |
|  | Dark Rose |  |  |  | Choice |  |  |
| 3066 | Light Rose |  | \$2 . . . 10 |  | ieties Hollyhocks, | Chater's Superb |  |
|  | Orange |  |  |  |  |  |  |
| 068 | Maroon |  | \$2 |  |  |  |  |

## IPOMEA

(Moonflower. Morning-Glory. Cypress Vine)
Of all our climbers for garden and greenhouse, these are the quickest and most luxuriant in growth, carrying to great height a splendid curtain of leafage, studded, as summer heat comes on, with large, satiny blooms of lovely colors. Ipomœas grow so easily from annual sowings that it is no longer thought necessary to winter over roots or young cutting plants under glass. The large, horny seeds of some varieties should be soaked in hot water before planting. For early flowers sow in hotbeds or pots and boxes under glass, and transplant to rich, deep soil in summer quarters as soon as danger of frost is over, when sowings may also be made in the open ground. Nothing finer for porches, trellises, etc.
ANNUAL VARIETIES. From early sowings these begin to bloom in June and July and are full of beau- tiful flowers all the season, often blooming fully until cut down by frost.
3086 coccinea. Scarlet flowers ; io ft. per oz., i5c. . pkt.,3087 " lutea. A yellow-flowered variety20C. . . . 5Imperial Japanese. See Japanese Morning-Glories, page 82.
Northern Light. A beautiful hybrid, with extra large and handsome flowers of a beautifullavender-pink ; blooms very early ; I 5 ft .Io
hederacea grandiflora. Rich sky-blue flowers, with white margin ; 15 ft . ..... 5
53097Mexicana grandiflora alba. The great white Moonflower ; 15 ft . . . . . . " 75 c
3098 " " hybrida. Flowers very large and numerous ; blooms earlier ; is ft.10
3 Ioo bona nox (Good-Night, or Evening-Glory). Opens large white flowers in the evening; I5 ft . ..... 5
3 Ior Heavenly Blue. The very large clustered flowers of beautiful sky-blue open early in the morning. Unusually distinct and handsome; io ft. Sow early ..... 25
Quamoclit (Cypress Vine, Star Flower). A tender annual, with fine cut leaves and smallstar-shaped flowers. This, the type, is scarlet-flowered ; 1o ft. . oz., 30c. . . 5
3105 " White 30c. ..... 5
3106 " Kerberi. A fine new scarlet-flowered variety that blooms late ..... Io
3108 " Mixed Cypress Vine . . . . . . . . . . . . . . . . . . . . per oz., 30c. ..... 5
3110 flowers. A hardy annual

## IPOMOEA, continued

GREENHOUSE CLIMBERS. These handsome vines grow nicely in the open ground, but bloom almost too late to be very useful there, in all except warm climates. Grown in pots, tubs or greenhouse beds, they flower grandly between October and : pring
3 II2 Horsfalliæ. A superb West Indian species of vigorous growth. The rich, thick leafage is beautiful ; the flowers a deep glossy rose-purple ; 15 ft. . . . . . . . . . . . . pkt., 25
3 II 3 Learii. Very quick and strong in growth, succeeding admirably outdoors sometimes. The flowers are a beautiful violet-blue; 15 ft .
3 II4 rubro-cœrulea. Bright red; 8 ft . . . . . . . . . . . . . . . . . . . . . . . . . . . . Io
3115 " " alba. White flowers ; $8 \mathrm{ft} .$. . . . . . . . . . . . . . . . . . . . . . 10
3116 setosa (Brazilian Morning-Glory). This vine makes an immense, thick growth of great lobed leaves, lighted by a profusion of large rosy flowers with a satiny pink star in the center. The red pubescent stems and seed-pods add to its attractiveness ; 1o to 20 ft . . io
Collection, including 12 varieties. Annual sorts . . . . . . . . . . . . . . . . . . . . 50

## LOBELIA

The Erinus varieties are charming little plants that bloom very quickly from the seed and continue gay with flowers all through the season. For beds, edgings, baskets and pots we have nothing prettier ; their exceedingly clear, cheery colors and generous bloom make them welcome anywhere. Sow outdoors in early spring where the plants are to grow, and thin moderately; or transplant several inches apart in rich, open soil. Some stimulant given when they are in bloom greatly improves the flowers. Almost all are also good winter conservatory plants of trailing habit. The perennial or tall varieties are handsome, showy plants, found quite effective for backgrounds and grouping.

| ERIN | ARIETIES |
| :---: | :---: |
| 3124 | gracilis. Blue ; trailing ; beautiful for baskets . . . . . . . . . pkt., 5 |
| 3125 | speciosa. A favorite blue-flowered edging plant; 6 in . |
| 3126 | alba. White flowers . |
| 3128 | kermesina. Crimson |
| 3129 | Lindleyana. Rose ; white eye |
| 3130 | Paxtoniana. Blue and white |
| 3131 | Barnard's Perpetual. Deep blue, with white eye; very fine. |
| 3133 | erecta, Crystal Palace compacta. Dark |
|  | blue ; for bedding; 6 in. . 25 |
| 3135 | Emperor William. Light blue. 10 |
| 3136 | Golden Queen. Dwarf; blue flowers, yellow leaves |
| 3138 | White Lady. Splendid new |
|  | large-flowered white . . . 25 |

ERINUS VARIETIES ( tA ) -
3124 gracilis. Blue ; trailing ; beautiful for
baskets . . . . . . . pkt.,
edging plant ; 6 in.
3126 alba. White flowers
5
3128 kermesina. Crimson
3129 Lindleyana. Rose; white eye . . . 5
3130 Paxtoniana. Blue and white . . $\cdot$ Io
3131 Barnard's Perpetual. Deep blue, with
white eye ; very fine . . . . . . Io
3I33 erecta, Crystal Palace compacta. Dark
blue ; for bedding; 6 in. . 25
3135 "
3 ". flowers, yellow leaves . .
large-flowered white . . . 25

## INUS VARIETIES (tA) -

3125 speciosa. A favorite blue-flowered edging plant; 6 in.

PERENNIAL, or TALL VARIETIES-
3142 tenuior. Rich cobalt-blue flowers with white center, nearly an inch across; of graceful habit and specially adapted for pots . . .
3143 cardinalis (Cardinal Flower). Long rdinalis (Cardinal Flower). Long dinal-red 50

## ERINUS VARIETIES, continued

3140 Royal Purple. Deep blue, with a distinct white eye . . . . . . pkt., 10
3 14I Mixed. . . . . per oz., $60^{\circ}$. . . 5

3144 " $\begin{gathered}\text { Queen Victoria. Brilliant } \\ \text { Scarlet, dark leaves }\end{gathered}$
3144 " $\begin{gathered}\text { Queen Victoria. Brilliant } \\ \text { Scarlet, dark leaves }\end{gathered}$
Io

3145 ramosa. Blue flowers in fall ; 1 ft . . Io
Choice Collections, including-
12 varieties Lobelia
60
40

## MARIGOLD

(Tagetes)

These, like the Calendulas, are valuable because they light the garden with such a grand glitter of yellow far into the frosts of autumn. The dwarf varieties make a fine border for taller sorts, and both are effective when planted in groups or in garden borders. Hardy annuals. Average height, $1 / 2$ to 2 feet.

| 3154 | African. | Stronger in growth and larger in flower than the French varieties. The dwarf sorts grow only about 18 inches high and bloom earlier than tall ones. Flowers lemon-yellow, double $\qquad$ |
| :---: | :---: | :---: |
| 3156 | " | Eldorado. Large, quilled, perfectly double ; brilliant shades of yellow . oz., 50c. . |
| 3157 |  | Nugget of Gold. Golden yellow, double . . . . . . . . . . . . . . . " 50 |
| 3158 | " | Pride of the Garden. Extra large, double flowers of richest yellow; dwarf and neat. Io |
| 3159 | " | Delight of the Garden. Also dwarf and large-flowered; lemon-yellow, double . . io |
| 3160 | " | Lemon Queen. Very rich lemon color . . . . . . . . . . . . . . . per oz., 50c. |
| 3161 | " | Prince of Orange. Beautiful orange color . . . . . . . . . . . . . " 50 c . |
| 3162 | " | Mixed Double . . . . . . . . . . . . . . . . . . . . . . . . . . " 40 ¢ |
| 3164 | French, | Tall Orange. Yields an amazing number of charmingly conventional, orangecolored little blossoms; ift. |
| 3165 |  | Dwarf Striped. This and the next have flowers handsomely marked; $11 / 2 \mathrm{ft} . \mathrm{oz}$., 40 C . |
| 3166 | " | Gold Striped. Rich and quaintly striped double flowers . . . . . . . . " 4 oc. |
| 3168 | " | Legion of Honor. Single golden yellow blooms, marked with velvety red ; dwarf |
| 3169 | " | Tall Mixed Double . . . . . . . . . . . . . . . . . . . . . . . per oz., 40c. . 5 |
| 3170 | '" | Dwarf Mixed Double . . . . . . . . . . . . . . . . . . . . . . . " 40c. . 5 |
|  | Choice | Collections, including 8 varieties Marigold, Double French . . . . . . . . . . 35 |
|  | ، |  |
|  |  | See also Calendula, page 68, for the popular Pot Marigold. |

## MIGNONETTE

(Reseda. ha)

Every in- or outdoor garden must have Mignonette in plentiful supply. The seed can be sown at any time, and if successive sowings are made its fragrant, modest colored flowers may be gathered outdoors until November. Sow in pots or boxes under glass in February or March and thin or pot off the

15. Sow outdoors in rows about April I, and again regularly at intervals of about three weeks till August, a row or two at a time for succession. The July sowing will make good winter-flowering plants. Average height, I foot.

| 3176 | Reseda odorata. Sweet . . . . oz., I5c. . pkt., 5 |
| :---: | :---: |
| 3177 | grandiflora. Large flowers . . . . oz., I5C. . . 5 |
| 3178 | Golden Queen. Golden yellow . . " 300. . 5 |
| 3179 | Crimson Queen. Crimson . . . . " 30c. . . 5 |
| 3180 | Machet, Dwarf. Deep red; 9in. . " 6oc. . . ıo |
| 3181 | Golden Machet . . . . . . . . . " 6oc. . . Io |
| 3182 | Bismarck New improved dwarf; fine . . . io |
| 3183 | Gabrielle. Large red; 9 in. . . . . oz., 60c. . io |
| 3184 | Victoria. Compact ; brilliant red ; 6 in. . oz., 6oc. Io |
| 3186 | Miles' Spiral. I ft. : . . . . . per oz., 3oc. . 5 |
| 3187 | Giant Pyramidal. $11 / 2 \mathrm{ft}$. . . " 20 c . . 5 |
| 3190 | Allen's Defiance. Full, round spikes of great length ; very fragrant and fine for cutting; $\mathrm{I}^{1 / 2} \mathrm{ft}$. |
|  | 3192 Ruby. New ; very fine strain of the Machet, with coppery scarlet |
|  | flowers . $\qquad$ per oz., \$1.50 . 10 Parson's White. White and buff ; |
|  | Choice Collection, including- . 5 |
|  | Io varieties of Mignonette . . . . . . 50 |

## IMPERIAL JAPANESE MORNING-GLORY

This race is now celebrated everywhere for extraordinary beauty. One great charm lies in the infinite variety of its flowers and leaves. The latter differ greatly in shape as well as in size, and while some are plain green, others are oddly marbled and blotched with white or yellow. The colors and markings of the flowers are almost indescribable, varying from pure white to rose, crimson and carmine, through blues and purples of every shade to almost black. There are velvety single self-colors, a few doubles and semi-doubles, others with quilled or feathered petals, many fancifully bordered, blotched, striped, penciled and marbled, hardly any two plants from a seed packet seeming alike. The vines are wonderfully vigorous, growing rapidly to a height of 30 or 40 feet, and their foliage is spangled with hundreds of these large and lovely flowers. (For Morning-Glories, see page 80 and General List of Flower Seeds.)
3198 Finest Single Mixed. Large-flowered; all colors . . . . . . . . . . . per oz., 25c. . pkt , 5
3199 Fringed Single Mixed. All beautifully fringed . . . . . . . . . . . . . " 50c. . . . 10
3200 Double-flowered Mixed. Superb mixture of double sorts . . . . . . . . . . . . . . . Io
3201 Giant "Mikado." The largest-flowered of all . . . . . . . . . . . . . . . . . . . . 10
3202 Yellow. Very distinct and striking . . . . . . . . . . . . . . . . . . . . . . . . . . 10

## BRAZILIAN MORNING-GLORY (Ipomea setosa)

This vine makes an immense, thick growth of great lobed leaves, lighted by a profusion of large rosy flowers with a satiny pink star in the center. The red pubescent stems and seed pods add to its attractiveness ; Io to 20 ft . Pkt. Io cts.


THORBURN'S MIXED TOM THUMB NASTURTIUMS (See page 84)

## J. M. THORBURN \& CO., 36 CORTLANDT ST., NEW YORK NASTURTIUMS

A marvelous range of new colors has been developed in this favorite flower, which for three or four months of the season makes a better display than almost any other plant. No other annual will produce such a lavish profusion of flowers for so long a time with the same small outlay of time and labor. The maximum of bloom is produced in thin soils, and never flags through the hottest weather. In soils too urich leaves predominate, and the plants are apt to rot off in wet weather, especially if standing too close.

## DWARF, or TOM THUMB NASTURTIUMS <br> (Tropaolum nanum)

These have a neat, compact habit and attractive foliage, are not disturbed by insects, bloom in two months from sowing and most profusely the whole season.


## TALL, or CLIMBING NASTURTIUMS

(Tropcolum majus)
Besides their ordinary garden use for trailing over fences, trellises, stone walls, etc., these can also be grown as pot-plants for winter flowering, as screens, or as trailers for hanging baskets and vases.


## LOBB'S AND OTHER NASTURTIUMS

(Tropaolum Lobbianum, etc.)

TROP ÆOLUM LOBBIANUM. This class is remarkable for the intensely brilliant colors of its flowers, which are a trifle smaller than those of other sorts. In moderately rich soil they climb high and bloom brilliantly. Average height, 6 feet.

3271 Ivy-leaved. A fine new strain with dark green ivy-like leaves and beautiful laciniated deep-scarlet flowers
per oz., 40c. . pkt., 5
3272 Asa Gray. Yellowish white3273 fulgens. Dark scarlet 25 C .
3273 fulgens. Dark scarlet . . . . . . . . . . . . . . . . . . . . . . . . . . 25C. . . .
3274 Marguerite. Pale yellow, flushed blood-red . . . . . . . . . . . . . " 25 c. . . . 5
3275 Lucifer. Very dark scarlet . . . . . . . . . . . . . . . . . . . . . " 6 25C. . . 5
3276 Crown Prince of Prussia. Blood-red . . . . . . . . . . . . . . . . " 25 . . . . 5
3277 Geant des Batailles. Sulphur and red . . . . . . . . . . . . . . . . " 6 25C. . . 5
3278 Primrose. Cream, with brown spots . . . . . . . . . . . . . . . . " 25 C. . . 5
3279 Crystal Palace. Scarlet . . . . . . . . . . . . . . . . . . . . . . . . . 25 C . . . 5
3280 Spitfire. Brilliant scarlet . . . . . . . . . . . . . . . . . . . . . . " 25 c. . . . 5

3283 Lilliput Mixed . . . . . . . . . . . . . . . . . . . . . . . . . . . " 4 25C. . . 5
3286 Finest Mixture . . . . . . . . . . . . . . . . . . . . . . . . . . . . " 20c. . . . 5
3288 Madame Gunter Hybrids. A French strain noted for wide range of fine colors . oz., 25c. . . 5
GREENHOUSE PERENNIALS. Beautiful climbers for house decoration. Should be grown in pots. 3290 Tropæolum pentaphyllum. Orange and yellow


PANSIES

## PANSY

(Viola tricolor, Heart's-ease. hA)

The Pansy is a plant that we all delight to grow in plentiful supply for flowers all the year. For very early outdoor bedding the seed is sown in fall, in a coldframe, or in rich, moist garden beds from which the plants can be transferred to a coldframe, setting them 2 or 3 inches apart each way, before severe winter weather begins. In spring three-fourths of them can be lifted out for bedding and the rest left to bloom in the frame. For winter bloom in a frame, set the plants about twice as far apart, and thin out half of them in spring. Cover the blooming plants with sashes, adding a covering of matting cr straw in very cold weather. In mild weather remove the mats and tilt the sashes to admit light, heat and fresh air. In outdoor beds raised a few inches above the ground, with a mulch of dry leaves and some brush to hold them in place, Pansies will often winter nicely, and bloom until midsummer, when a relay of young, vigorous plants should be ready to replace them. Spring sowings should be made early, so as to secure good flowers during the early rains. Seed sown in a cool, moist place in June and July, and well tended, will give good flowering plants for fall. If they come into bloom in the heat of summer the flowers may be small at first, but as the weather becomes cooler they will increase in size and beauty. Through summer heat the flowers are finer in a somewhat shaded place, but in almost any situation good Pansy seed will give fine flowers in spring and fall. Early fall sowings give the finest flowers.

3298 Thorburn Superb. The richest and most choicely varied mixture ever offered. It pro-
329 duces only the finest colors, largest flowers and most beautiful forms . per oz., $\$ 5$. pkt.,
25 Bugnot Superb Blotched. An exceedingly large three-blotched strain, with upper petals finely lined; great diversity of finest colors Cassier, Finest Mixed. Flowers of grand size, beautifully spotted.

PANSIES, continued


## PETUNIA HYBRIDA <br> ( $h h A$ )

Once fairly started, the Petunias grow almost as easily as weeds and furnish a glorious succession of bloom from early summer until frost. The Large-flowered strains are very beautiful and of almost endless variety. Seed of the Double and Giant-flowered Petunias is made expensive by the great amount of labor involved in hand-fertilization, and it is well to handle seed and tiny seedlings with some care. Sow in hotbed, coldframe, or in boxes of fine soil in the sunny windows of a warm room in April or May, and transplant about a foot apart in garden beds. Seed of the double varieties has not so much vitality as that of single sorts and needs a little more care in watering to be sure of germination. We have no better plants than the Petunias for beds and masses, borders, window-boxes, baskets and vases. They will grow in almost any soil and bloom profusely through long droughts. The newer varieties are of brilliant colors.
SINGLE LARGE-FLOWERED. These have flowers 4 or more inches across. Our strains are superb,and the collections offered contain only the finest varieties. Average height, $\mathrm{I}^{1 / 2}$ feet.
3376 White. Clear paper-white flowers of unusual size ..... pkt., 10
3377 intus aurea. Large, yellow-throated, crimson flowers ..... 25
3378 Crimson Giant "Midnight." Great flowers of deepest crimson ..... 25
3380 Purple. Royal in color and size ..... 25
3382 Rose. A charming shade ..... 25
3383 The Rainbow. Of richest colors, with yellow, penciled throats ..... 50
3385 Ring of Emerald. Pink and crimson, bordered with green ..... 50
3386 alba magnifica. A new variety, with large flowers of the clematis shape ..... 50
3388 superbissima. Grand flowers of various colors, with richly tigered throats ..... 50
3390 Thorburn Superb Giant. A strain of surpassing beauty, with flowers extremely large and deep-throated; some of them are exquisitely penciled and elegantly fringed ..... 25
339 I Howard's Star. Rich crimson, with distinct white star in center ..... 10
3392 Superb Single Mixed. Offers a grand variety of colors ..... 25

## PETUNIA HYBRIDA, continued

3394 White, "Snow Storm." Finest white in this section ..... pkt., 25
335Titania. Beautiful vel- vety purple flowers with broad white margins . . pkt., 50
Ruffled Giants. Extra large flowers, beautifully ruffled, fluted and fringed
3399 Thorburn's Century Prize An unrivaled strain of fringed, ruffled, giant-flowered sorts in most beautiful colors. Our novelty of last year.
50

## 3400 Mixed Fringed 25

3402 Perfection. Choicest fringed sorts . . $5^{\circ}$

## DOUBLE LARGE-FLOWERING.

Our seed will produce flowers large, fragrant, elegantly formed and beautiful either for house, garden or conservatory. The Double Petunias are great favorites for pot culture in ordinary windows.
3404 Double Mixed . pkt., 50
3405 Double Fringed Mixed. Flowers large and much beruffled; very choice. 75
Double Fringed Lady of the Lake. Exquisite flowers of finest size and purest white . .
3408 Double Fringed "Heliotrope." New; mauve and heliotrope colorings
75
3409 Double Fringed Snowball. A grand pure white; extremely double;

petunias extra large flower
pkt., 75
3410 Double Fringed Crimson. Gorgeous colors; extra large flowers . . . . . . . . . . . . . 75
SINGLE BEDDING VARIETIES. Smaller-flowered sorts, found most valuable for beds and masses.
3415 Countess of Ellesmere. Dark rose, with fine white throat
3416 Inimitable Dwarf. Bushy little plants, covered with masses of star-shaped flowers; 5 to 8 in. Io
3417 " Red Star. Very dwarf and compact; exceedingly effective . . . . . . . . . Io
3418 venosa. Variously colored; beautifully veined . . . . . . . . . . . . . . . . . . . . . . 0
3422 Mixed Single. Very fine colors, striped and blotched . . . . . . . . . per oz., \$I.25 . . 5
Collections of Petunias. These contain only the finest varieties.


## PHLOX DRUMMONDII, ETC. <br> (Flame Flower)

The annual Phloxes are dazzling in effect, particularly so when sown in masses or ribbon beds of contrasting colors. Few flowers are so easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost and care. There are few desirable colors beyond their range, and if given good soil and plenty of water they furnish a long supply of delicate flowers for cutting. For pot culture, as trailers, and as an undergrowth for tall, bare-stemmed plants they are also valuable. The first sowings should be made as soon as the frost is out of the ground

## PHLOX DRUMMONDII, ETC., continued

 in spring ; later ones in May, either where the plants are to bloom, or on a seed-bed, as the Phlox transplants readily. In transplanting set the taller kinds about a foot apart; if planted too thickly they suffer from mildew. Cutting away the flowers and seed-pods makes the plants more bushy and compact, and lengthens their blooming time. Average height, ifoot.GRANDIFLORA. This section has beautiful, round-petaled flowers, larger than in the older sorts. Showy and constant.

| 3428 | alba. Pure white . . . . . . pkt., 10 |
| :---: | :---: |
| 3429 | alba oculata . . . . . . . . . . . . 10 |
| 3430 | atropurpurea. Dark purple . . . . Io |
| 3431 | Chamois Rose. A soft shade |
| 3432 | coccinea. Large ; brilliant scarlet . Io |
| 3434 | Crimson |
| 3436 | Eclipse. Rosy violet, blue-veined |
| 3437 | Half-Dwarf Crimson Bouquet. Rich . Io |
| 3438 | Isabellina. Yellow . . . . . . . . 10 |
| 3439 | kermesina. Vivid crimson . . . . . Io |
| 3440 | rosea. Rose |
| 3442 | kermesina splendens. Scarlet and white 10 |
| 3443 | stellata splendens Star-likecrimson. Io |
| 3444 | William I. Scarlet-striped . . . . Io |
| 3448 | Mixed. Various large-flowering <br> sorts . . . . . . . per oz., 75C. . io |

DWARF VARIETIES. Plants of this charming
section grow only 6 or 8 inches high, and form dense masses of bloom all summer. They are especially useful for beds, edgings, pots, etc.

DWARF VARIETIES, continued
3450 Surprise. Brilliant vermilion, with pure white star center; splendid for groups and edgings . . . pkt., io
3452 Snowball. Pure white . . . . . . Io
3453 Firetall. Bright flame-red . . . . . 10
3454 hortensiæflora. Rose . . . . . . . 10
3456 Chamois Rose. Very fine . . . . . Io
3457 Heynholdi. Scarlet. Fine for pots. io
3460 Graf Gero, Mixed. Fine for pots . . Io
3462 Fancy Mixed . . . . . per oz., \$2 . io

## SMALL-FLOWERED VARIETIES -

3464 Radowitzii. Rose, spotted white . . 5
3465 cuspidata (Star af Quedlinburg). Starshaped; many colors . . oz., \$I . io
3466 Mixed. All colors . . . . " 50c. 5 Collection, including-
io varieties Phlox Drummondii . . . . . . . . 50
PERENNIAL PHLOXES. These hardy Phloxes make large bushes about 3 feet high and bear large heads of finely colored flowers.

3470 Phlox decussata, Mixed . . . . pkt., іо
3472 Large-flowered Hybrids, Mixed . . . 25

## PINKS (Dianthus)

In this large and greatly varied genus are some of our most beautiful and best-loved flowers, unsurpassable for color and fragrance. They are hardy biennials that bloom finely the first season, remaining green all winter and blooming the next year also, if lightly protected. Old plants flower the earliest, but as young ones give the largest, finest flowers,


PINES sowings are made every year. Seed can be sown under glass in spring, or in an open sheltered bed. The seedlings are easily transplanted and should stand 8 to 12 inches apart; dwarf ones about 6 inches. If especially large, brilliant flowers are desired, a bed of well-mixed turfy loam, leaf-mould and well-decayed manure should be prepared for them. Average height, I foot.

3478 Dianthus dentosus hybridus. Pretty lilac flowers $\dot{\text { D }}$ pkt., 5
3479 Dianthus superbus, Dwarf Double White. Very double, snowy flowers; fine form; 9 in.
PINK, HEDDEWIGII, continued
3489 Single Crimson Belle. Flowers large and handsome; dark red. .....  pkt., ro
3490 "The Bride (Little Gem). White, with purple center
3490 "The Bride (Little Gem). White, with purple center ..... Io ..... Io
349 IDouble Mixedper oz., 75 c .Io
3492 "Mourning Pink." Very large, double flowers of blackish crimson, fringed white . ..... Io
3493"Fireball." Brilliant scarlet; very compact and floriferous25
3494 diadematus (Diadem Pink). Magnificent in color and variety . . per oz. \$i.25.. Io
3495 laciniatus, Salmon Queen. Beautiful rosy salmon; single ..... 10
3496 Oriental Beauty. Petals wide, crinkled, richly marked with pink, white, etc. ..... 10
3497 " Snowflake. Pure white ; extra fine ..... 10
3498 Single Mixed. Fringed flowers of all colors ..... 5
3499 Double Mixed ..... 10
IMPERIALIS FL. PL. (Double Imperial Pink). Robust, bushy growers, with large double flowers. 3502 Double Mixed per oz., 50c. . ..... 5
3503 " Dark Red. A deep rich color ..... 5
3504 " Dwarf White. Great snowy flowers; 9 in. ..... 5
3505 Mixed per oz., 50c. . ..... 5
PLUMARIUS (Sweet May Pinks). These are the fine, fragrant perennials of old-time gardens, stillreckoned among the most beautiful of all Pinks for massing and cutting.
3507 Pheasant's Eye. Pretty fringed flowers ..... 5
3508 Scoticus (Double Scotch Pink). A new series of exquisite colors; ours is the finest strain . ..... 25
3509 semperflorens ..... 10
3510 Single Pink, Mixed ..... 5
35 II Double and Semi-Double Grass Pinks. Pretty flowers of delicate colors ..... 10
Collections of Pinks, including 12 varieties Fine China ..... 50
"، ". " ..... 40

## POPPY (Papaver)

Before tulips are fairly gone our gardens begin to be gay with Poppies, which, in some one or other of their many forms, continue to enliven it with a profusion of bright blooms until frost. No other flower so bold and brilliant has the same grace of stem, airiness of poise and delicacy of tissue. For beds and borders with a background of green, there is nothing finer ; some sorts are admirable for naturalizing in open wooded grounds ; others, like the Shirley, are beautiful for cutting. A sandy loam suits Poppies best, and as their strong tap-roots are difficult to transplant, it is well to sow seed where the plants are to bloom. Sowings made in fall and at intervals in spring will provide a long succession of flowers. Sow thinly, covering very lightly, as the seed is quite small, and thin the plants to stand about a foot apart. The best plants are those grown from early sowings while the earth is cool and moist.
PERENNIAL VARIETIES. Tall, large - flowered and showy; effective among shrubs. Average height, 2 to 4 ft .

3513 bracteatum. Scarlet;
3 ft. . oz., 50 c . . pkt., 5


POPPIES

## J. M. THORBURN \& CO., 36 CORTLANDT ST., NEW YORK

POPPY, PERENNIAL VARIETIES, continued
3514 Orientale. Enormous flowers of deep flashing scarlet ; entirely hardy anywhere ; 3 ft . . pkt., ..... 10Mixed Hybrids. Finest shades
351510
3517 nudicaule (Iceland Poppy). These dwarf, bright yellow Poppies form one of the chiefattractions of the garden through several months. They are most beautifulwhen grown in masses from seed sown early every year ; I ft.Io
3518 "، aurantiacum. Orange. All this class has crimped petals and peculiar grace ..... Io
3519 album. Pure white ..... 10
3520 Mixed Iceland Poppies ..... Io
ANNUAL VARIETIES. This section includes double and single flowers of greatly varying sizes, self-colored and daintily edged. All are easily cultivated and greatly admired. Average height, 3 feet. 352I Thorburn Giant White. White flowers of grand form and size; 3 to 4 ft . ..... Io
3522 Maid of the Mist. Pure white, single, very large, deeply fringed ; 3 to 4 ft . ..... IO
3523 Miss Sherwood. New, large, single, satiny white, with upper half of petals chamois-rose the flowers are of great substance and fine for cutting ..... Io
3524 Mephisto. Beautifully fringed; varies from red and black to rose and white ..... 5
3525 Flag of Truce. Pure white, large and showy flowers ..... Io
3526 Shirley. Indescribably bright, dainty and gauzy ; a favorite for cutting ..... IO
3528 glaucum ( Tulip Poppy). Striking, tulip-shaped flowers of intensely brilliant scarlet ; dwarf ..... Io
3529 pavonium (Peacock Poppy). Intense scarlet, with broad bands of purplish black ..... 5
3530 umbrosum. Rich crimson, spotted with black ..... 5
353I lævigatum. Scarlet, with white marks at petal bases; very showy ..... IO
3533 Danebrog. Large, single, scarlet, with white cross at base of petals ..... 5
3535 Double White ..... per oz., 25c.5
3536 " Scarlet ..... 5
3537 " Mikado. Large white flowers, attractively fringed with rose ..... 5
3538 " Cardinal. The immense scarlet flowers last unusually well ..... 5
3539 " American Flag. White, bordered with scarlet ..... 5
3540 " Carnation-flowered. Very double, fringed; colors dazzling . . . . per oz., 2oc. ..... 5
3541 " Pæony-flowered. Large, handsome flowers of many colors ..... 5
3542 Ranunculus-flowered. Flowers small, finely formed, double ..... 5
Collections of Poppies, including-
12 varieties Double Carnation-flowered . . . \$0 $50 \mid 6$ varieties Double Dwarf Pæony-flowered . . \$o ..... 30
I2 Pæony-flowered

$\square$
Ranunculus-flowered ..... 30

## PORTULACA

This charming little annual is unrivaled for brilliancy among plants of low growth, and has the happy faculty of flourishing under almost all conditions, though hot sun and a light sandy soil suit it best. Nothing is prettier for beds, edgings, rockwork, and for filling up irregular spaces or unexpected gaps in flower beds. As an undergrowth for taller plants it is also valuable. Through the driest, hottest seasons it flourishes amazingly, carpeting the ground with a mat of succulent foliage that in the forenoon is hidden by gayest flowers. The seed does not germinate until hot weather, and should be sown late. Beyond the sowing, this plant requires little care ; it can be transplanted in full flower. Average height, 6 inches.

SINGLE VARIETIES. Each strong plant will cover a space about 2 feet in diameter.

| 3546 | splendens. Crimson . . . . . . pkt., | 5 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 3547 | Rose, Carnation-striped . . . . . . . . . | 5 |  |  |  |
| 3548 | Thellusonii. Scarlet | . | . | . | . |
| 3549 | albiflora. Pure white. . . . . . . . . | 5 |  |  |  |
| 3550 | aurea. Deep golden yellow | . | 5 |  |  |
| 3551 | Thorburni. Beautiful bright yellow | . | 5 |  |  |
| 3552 | rosea, Rich rose . . . . . . . . . . . . | 5 |  |  |  |
| 3554 | Mixed . . . . . . . . per oz., | $50 c$. | 5 |  |  |

DOUBLE VARIETIES. The flowers are so full and perfect as to resemble tiny roses; toward the close of the season they will increase in size and beauty. As the full double flowers do not produce seed, it must be saved from semi-double flowers growing with the full doubles. The product of that seed will produce many single flowers. As these bloom earlier, they can be pulled out like weeds.

## DOUBLE VARIETIES, continued

When the full doubles appear, cuttings can be made from them and the bed extended indefinitely with only full double flowers.

3556 Double Scarlet . . . . . . . . . pkt., I5
3558 " Yellow . . . . . . . . . I5
3559 " Salmon . . . . . . . . . . I5
3560 " Golden, Striped Red .... I5
3561 " Bright Red . . . . . . . . . 15
3563 " Rose . . . . . . . . . . . . I5
3564 " Golden . . . . . . . . . . . 15
3565 " White . . . . . . . . . . . 15
3566 " New French White . . . . . I5
3570 " Mixed . . . . . per oz., $\$ 5$. 10
Collections, including-
12 varieties Portulaca, single . . . . . . . . . 60
6 " " double . . . . . . . 60

## RICINUS

(Castor-Oil Plant)
Picturesquely showy and imposing, the Ricinus gives to the garden magnificent semi-tropical effects, and may be used in a variety of ways. Grown as a specimen, it makes a perfect pyramid of gigantic leaves; a dozen plants in a large bed show a glorious mound of glistening colors and may be admired from a long distance ; planted thickly, it soon forms a handsome screen or hedge ; the lower-growing,

## RICINUS, continued

dark-leaved sorts are beatutiful for dotting here and there among Cannas, scarlet Pelargoniums, etc. Tall varieties grow from 8 to io feet high, with leaves several feet across and beautifully lobed. Half-hardy annuals.

3574 Borboniensis. Violet . oz., I5c. . pkt., 5
3575 Africanus. Bright colors; 8 ft . . . 5
3576 Gibsoni. Violet-bronze; 5 ft . . . . 5
3577 macrophyllus. Dark purple; 6 ft . . . 5
3578 Cambodgensis. Glistening red-maroon; stems black ; 5 ft . . . Oz., 40c. .
3579 macrocarpus. Deep purple ; 5 feet . . 5
3580 Philippinensis. Immense leaves; 6 ft .
358 I
purpureus. Rich purple.

| $\begin{aligned} & 35^{82} \\ & 3583 \end{aligned}$ | sanguineus. Red stems and seeds; 6 ft . |
| :---: | :---: |
|  | Zanzibariensis. Surpasses all in size and |
|  | beauty of colors, which include glau- |
|  | cous-green, coppery brown, metallic |
|  | red, brownish purple, red-maroon |
|  | and bronze ; 8 to io ft. . . oz., 25c. |
| 3588 | Mixed . . . . . . . . . . . ${ }^{\text {15 }}$ - . 5 |
|  | Collections, including- |
| ${ }^{12} 6$ | ties Ricinus, choicest sorts . . . . . . . 50 |
|  | " " " " . . . . . . 30 |

3583 Zanzibariensis. Surpasses all in size and cous-green, cop, brown molli red, brownish purple, red-maroon and bronze ; 8 to io ft . . . oz., 25 C . . 5

Collections, including-
$\underset{6}{12}$ varieties Ricinus, choicest sorts . . . . . . 50

## SALVIA

## (Flowering Sage)

The Saliia splendens is a standard bedding plant that keeps the garden bright with color until late in autumn. For pot culture, for cutting, for borders, and for forming bushy, hedge-like lines in the garden it is very valuable. In this climate sow seed in window-boxes or frames, in March or April, and set the plants outdoors the latter part of May ; or sow outdoors not before first of June, and protect from heavy rains and strong winds. The plants grow and bloom profusely in any light, rich soil. Both the tender and hardy perennial sorts bloom the first year and all are treated as annuals.
3592 argentea (hP). Silvery-leaved; flowers white ; blooms in spring ; 3 ft . ..... 5
3593 farinacea (hA). Light blue flowers in great abundance; forms a neat bush; 3 ft . ..... 5
3594 patens. A handsome tender perennial, with erect spikes of superb rich blue flowers in summer ..... 25
3595 Rœmeriana (hA). Crimson-flowered; very dwarf and of neat habit5
SPLENDENS. These are the well-known bedders, single plants of which carry hundreds of long,flaming flower-spikes open at one time, keeping up the display until frost.
3597 splendens grandiflora, Scarlet. A rich-flowered bedder; 3 ft. . . . . . . per oz., $\$ \mathrm{r} .50$. . ..... 10
Bonfire. Our well-known compact Salvia-the freest-blooming of all, seemingly on fire all the time with dense, flaming scarlet spikes; $2 \frac{1}{2} \mathrm{ft}$.
3601 ..... Io
3602 " Scarlet Dragon. Intense scarlet, long spikes of very large flowers ..... Io
3603
Golden Blotched Foliage. Leaves bright green, blotched light golden. Extremelyfloriferous ; erect growth, about 20 inches high by same diameter. Splendid.
3604 " Silverspot. Rich green leaves elegantly spotted with yellow. The intense brightscarlet flowers are large and lavishly borne ; neat and compact ; $21 / 2 \mathrm{ft}$. . .25
3605 " Excelsior. Very early; dwarf bushy plants; intense scarlet ..... 25
3606 Black-seeded Dark Scarlet. New. Very dark scarlet ; compact growth ..... 253607 "Lord Fauntleroy. Our new dwarf Salvia, introduced last year. The plants growonly i8 inches high, are very compact and covered with flower-spikes stand-ing clear above the foliage and of a brilliancy of color exhibited by no otherplant. Fine for bedding in masses or for borders around beds of taller plants.25
$3607 a$ Maroon Prince. Maroon color ; striking and distinct. New variety ..... 25

## SNAPDRAGON

## (Antirrhinum)

The Snapdragon is one of our finest perennials, flowering the first year as annuals. Its bright-colored, curiously formed flowers always excite interest, and among the newer sorts are flowers of a great variety of colors and markings, some of wonderful brilliancy, others soft and pleasingly shaded, and still others with a velvety appearance. Their rich spikes are beautiful for cutting, and keep fresh a long time. From seed sown in the open ground plants will bloom in July and August. For early flowers sow under glass in February or March and transplant into beds of warm, dry soil moderately enriched. The Snapdragon, like most perennials and biennials which bloom the first year, is treated as an annual and sown every year. Average height, $11 / 2$ feet.

## GRANDIFLORA VARIETIES -

| 3608 | Delilah. White and carmine | t., |
| :---: | :---: | :---: |
| 3609 | Galathee. Crimson and white | . . 5 |
| 3610 | Striped. Odd and pretty | . 5 |
| 3611 | Firefly. Scarlet and white | . . 5 |
| 36112 | Romeo. New ; lovely deep | - |
| 3612 | White. Beautiful for cutting | 5 |
| 3613 | Yellow. A pure, soft color | 5 |
| 3614 | Queen Victoria. Large, white | Io |
| 3615 | Mixed . . . . . . . per oz., 50c. | . . . 5 |
| 3616 | New Large-flowered Mixed . | 10 |

DWARF VARIETIES. Plants of this section make elegant bedders, as they bloom extra profusely and are only about 6 inches high.

3617 Black Prince. New. Nearly black; very fine . . . . . . . . . . pkt., 1 о
3618 Pink Empress. Beautiful dark rose . Io
3619 Fine Dwarf Mixed . . . oz., 5oc. . . 5
3620 Tom Thumb Mixed. Very dwarf strain . . . . . . . per oz., \$1 . . 5
Collections, including-
12 varieties Snapdragon, Finest Tall 650

## STOCKS

(Mathiola)

From the general make-up of the great Stock family no desirable quality seems to have been omitted. The plants have good habit, fine leaves, beautiful and fragrant flowers in all refined colors, a long season of lavish bloom, vigor, and adaptability to many conditions of culture. Such plants naturally have many uses: we find them unsurpassed for bedding, edgings, pot culture, house or conservatory decoration, and for cutting. For bouquets and floral work the double white sorts are especially useful. To secure fine early flowers, sow under glass in March or April, transplanting the seedlings when an inch high into other pots or boxes, or into fine soil spread over some discarded hotbed. In showery May weather transfer to garden beds of deep, rich soil, setting the plants about a foot apart. Transplanting several times in the early stages of growth tends to give them a more dwarf and compact habit. For later flowers sowings may be made in the open ground in May. If plants that began to bloom late are carefully lifted and potted in fall they will flower finely all winter in a house that is tolerably cool and moist. The blossoms are very lasting. Average height, i to $11 / 2$ feet.

| GERMAN TEN WEEKS. These are the favorite half-hardy annuals, all the more prominent qualities of which have been given above. Our seeds are saved from the choicest double varieties. |  |
| :---: | :---: |
| 3622 | Dwarf Snowflake Forcing. Flowers pure white, unusually large and double ; extremely early . . pkt., 25 |
| 3623 | White Dresden Perpetual. Robust, branching; flowers large, pure white, in fine rosette shape |
| 3624 | "Cut-and-Come-Again." The wellknown profuse and perpetualblooming double white variety |
| 36 | Dwarf Large-flowering. Long, splendid spikes; large, double. <br> — -White . . . . . per oz., \$3 . . io |
| 3627 | Canary Yellow |
| 3628 | -Crimson . . . . per oz., |
| 3629 | -Chestnut. Red-brown |
| 3630 | -Blood-Red. Very rich . . . . 1 о |
| 3631 | Carmine |
| 3632 | -Rose. Very dainty . . . |
| 3633 | -Light Blue. Exquisite . oz., |
| 3634 | -Shining Purple-Carmine |
| 3635 | -Chamois |
| 3636 | - Mixed . . . . . per oz., \$2 . . io |
|  | Giant Perfection. Tall, handsome ; spikes large, flowers rose-like. |
| 3638 | White. $11 / 2$ to 2 ft . . . . . . . 25 |
| 3639 | - Mixed . . . . . per oz., \$3 . . ıo |
| 3640 | Ordinary Mixed . . . " 75 c . |
|  | Wallflower-leaved. The popular cutflower variety, with flowers of clearest possible colors, and dark glossy leaves. |

half-hardy annuals, all the more prominent qualities of which have been given above. Our seeds are saved from the choicest double varieties.

## GERMAN TEN WEEKS, continued

3642 Wallflower-leaved, White . . . . pkt., to
3643 -Crimson . . . . . . . . . . . 10
3644 - -Mixed . . . . . per oz., \$3 . . iо
3646 Dwarf German Bouquet Mixed. Flower-spikes thickly massed above the leaves ; ift. . oz., \$3. io
Emperor Large-flowering. Sow in spring for autumn and winter flowers; sow in midsummer for abundant spring bloom.
3648 - -White . . . . . . . . . . . . 25
3649 - Crimson . . . . . . . . . . . 25
3650 - -Mixed . . . . . . . . . . . . 25
AUTUMNAL and LATE-FLOWERING SORTS.
From seed sown in spring and summer these half-hardy biennials begin to bloom in fall and will keep up the display all winter and late into spring if transferred to cool, airy quarters in house or greenhouse. Usually the plants are wintered over in a frame for a grand spriag inflorescence. Their flowers have not so many colors as the Ten Weeks, but are larger and carried on longer, bolder spikes.

3654 Intermediate White Model. A superb new strain with pure white flower-spikes a foot long . . pkt., 25
3655 Intermediate Crimson . . . . . . 25
3656 " Mixed . . . . . . . . 25
3657 Winter Dwarf Crimson Bouquet. Pretty dwarf plants. pkt., 25
3658 " Scarlet . . . . . . . . . . 25
3659 " White . . . . . . . . . . . 25
3660 " Empress Elizabeth. Splendid carmine-rose ; dwarf; for pots and groups
3061 " Rose Brilliant of Nice. Most beautiful . . . . . . . . Mixed . . . . . . . . . . . 25

## CHOICE COLLECTIONS OF STOCKS



## SUNFLOWER

(Helianthus)
Very stately decorative plants with great masses of yellow flowers. A few plants of the tall sorts can be placed here and there throughout the grounds with telling effect ; it is the gardener's art to know how to locate them. Their golden yellow disks are like sunhursts among the shrubbery, and for backgrounds and screens nothing could be finer. Their long stems and wonderful lasting qualities also make them valuable as cut-flowers. Like the Eucalyptus, they are said to be good for absorbing the miasma of low grounds. Plant the seed in the open garden in spring, and thin the plants to stand 3 to 4 feet apart. The height of the different varieties varies greatly; all those below are hardy annuals.

3670 argyrophyllus (Texas Silver Queen). Has handsome silvery foliage and a profusion of small, elegant single flowers; 4 ft . oz., 20c. . pkt.
3671 Henry Wilde. Tall, smallflowered, graceful, single . per oz., I5c. .
3672 Primrose-colored. Graceful flowers of a lovely color; beautiful for cutting oz., 20c.
3674 macrophyllus giganteus. Huge leaves and yellow flowers; $5 \mathrm{ft} . \quad$. ${ }^{\circ}$ oz., I5c. .
3675 cucumeritolius ( Miniature Sunflower). Of pyramidal growth; covered with hundreds of bright orange, small, single flowers; 3 ft .
3676 cucumerifolius Stella. New, handsome, large-flowered primrose-yellow. oz., 50c. . cucumerifolius Orion. A very handsome new variety, with petals twisted like those of the best cactus-shaped Dahlias; excellent for cutting . per oz., 75c. . Io
3678 cucumerifolius hybridus fl. pl.
 A splendid mixture of new double and semi-double varieties

SUNFLOWER

3680 Double California. Dark yellow ; 2 to 5 ft . 5
368 I " Globe-flowered. Ball-shaped; blooms late; 3 ft. . . . . . . . . . . . per oz., I5c. . ${ }_{\text {I }}$. 5
3682 " Green-centered. Odd and attractive ; $3 \mathrm{ft} .$. . . . . . . . . . . . " 15 C . 5
3683 " Dwarf. Beautiful to grow in masses of 6 or more plants set about 3 feet apart. Each stem is tipped with a fine dahlia-like flower, 3 inches across . . . per oz., I5c. . 5 " Dwarf Variegated. Leaves beautifully spotted with yellow

## SWEET WILLIAM

(Dianthus barbatus. hP)
A splendid old-fashioned plant, producing its large heads of beautifully colored sweet-scented flowers in great abundance. It is a hardy perennial, easily grown and flowering the second year from seed.
3689 White, Single
369 J " Double ..... 5
3691 Dark Crimson, Single ..... 5
3692 rr 6 Double ..... 5
3693 Auricula-flowered Oculatus marginatus (Hunt's Perfection) ..... 5
$3693 a$ Mixed Single . . . . . . . . " Double. Very fine ..... 5 ..... 5
3694 Mixed Single ..... 5
3695
369510
Collection, including 6 varieties Sweet William ..... 30

## Sweet Peas

(Lathyrus odoratus)
Through the skill of specialists the Sweet Pea has become a much larger and lovelier flower than before it took such a strong hold on popular fancy. The plants are more robust, dwarf, branching, and bloom earlier and more freely, some varieties showing 3 to 4 blooms on a stem. Many new colors, deep, dark, brilliant and delicately lovely, have appeared in the blossoms, often in combinations exquisite and indescribable. There are flowers, too, of quite distinct shapes, some of which are a great improvement upon the Sweet Pea of the old type. We have dropped some of the older varieties, to give place to improved new sorts of the same colors. Our present list contains all the best kinds introduced to date.

A deep, rich moist soil is best suited to Sweet Peas. They are usually grown in double rows, with a wire trellis, or a row of brush between. For each double row make the drills about 5 inches deep, and 9 or 1 о inches apart. Sow plentifully, covering about 2 inches deep, and by degrees, as the vines grow up, fill the trenches with soil. Spring sowings should be made just as early as the ground can be prepared ; frost does not hurt the little seedlings. The earliest flowers are from seed sown in fall, preferably in a dry situation, and 4 or 5 inches deep, giving them level culture. As fertilizer, a liberal use of bone meal worked into the soil will give excellent results.

## THORBURN'S SELECTED SWEET PEAS ASSORTMENTS CONTAINING-

|  |  |  | 60 |  | , |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | " | " | 40 | " | " | " | " |  | 30 |
| 1 | " | " | 20 | " | " | * | " |  | 75 |
| $1$ | " | " | 10 | " | " | , | , |  | 40 |

## NAMED VARIETIES OF SWEET PEAS

| All five cents per packet |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 3698 | Agnes Johnson. New ; very large; bright pink, shaded cream color |  | \$0 30 | \$1 oo |
| 3699 | Admiration. Self-colored, in a delicate shade of mauve | Io | 20 | 50 |
| 3701 | America. Bright blood-red striped; very distinct | 10 | 20 | 50 |
| 3701 | American Queen. Magenta standard, deep rose wings | ıо | 20 | 60 |
| 2 | Apple Blossom. Bright pink and blush, beautifully shaded | Io | 20 | 50 |
| 3703 | Aurora. Flowers extra large ; standard and wings flaked and striped bright orange-salmon on white ground. | t | 20 | 60 |
| 3704 | Black Knight. Deep maroon self-color | 10 | 20 | 50 |
| 3705 | Blanche Burpee. Superb, pure white ; immense size, perfect form | Io | 20 | 50 |
| 3706 | Blanche Ferry, Extra-early. Pink and white ; ten days earlier than the ordinary. | . 1 | 20 | O |
| 3707 | Blushing Beauty. Soft pink, suffused with lilac ; extra large | 10 | 20 | 60 |
| 3708 | Boreatton. Crimson-purple; very dark, large flowers | ${ }^{10}$ | 20 | 50 |
| 3716 | Captain of the Blues. Bright purple and pale blue | 10 | 20 | 50 |
| 3717 | Captivation. Light magenta, self-colored | 10 | 20 | 50 |
| 3718 | Coccinea. Beautiful cerise self-colored; new | ıо | 20 | 50 |
| 3719 | Coquette. Deep primrose, shaded fawn | Iо | 20 | 50 |
| 3720 | Countess of Cadogan. Reddish mauve standard ; wings violet-blue |  | 20 | 50 |
| $3720 a$ | Countess of Lathom. Very pretty cream-pink |  | 20 | 50 |
| 3721 | Countess of Radnor. Standard delicate lavender; wings dark ma | 10 | 20 | 50 |
| 3724 | Crown Jewel. Creamy white, veined with violet-rose |  | 20 | 50 |
| 3726 | Daybreak. Rose-crimson, marbled white |  | 25 | 75 |
| 3727 | Dorothy Eckford. Fine new pure white, large flower | 15 | 40 | 25 |
| 3732 | Dorothy Tennant. Standard rosy mauve ; wings bluish mauve |  | 20 | 50 |
| 3736 | Duke of Clarence. Rosy claret; self-colored flowers; extra large |  | 20 | \% |
| 3738 | Duchess of Westminster. A very beautiful new apricot-pink |  | 20 | 60 |
| 3739 | Earliest of All. A splendid pink and white variety resembling the Blan Ferry, but flowering much earlier. It is one of the best for forcing . |  | 20 | 60 |
|  | Eliza Eckford. White, shaded and edged with light pink on standard |  | 20 | 50 |
| 37 | Emily Henderson. Splendid pure white ; good for forcing |  |  |  |
| 3745 | Emily Lynch. Rose-pink standard ; wings light pink and primrose, hooded |  | 20 |  |
| 3745a | Fascination. New; very charming lilac and blue |  | 20 | 50 |
|  | Fashion. Light purplish carmine ; a distinct color and very pretty |  |  | \% |
| $3746 a$ | Golden Rose. Light primrose-yellow, striped rosy pink |  | 25 | 5 |
|  | Gray Friar. Beautiful grayish lavender, on white ground |  | 20 |  |
| 3749 | Gorgeous. Standard bright orange; wings bright orange-rose. Very bright and showy ; a superb new variety |  |  |  |
|  | Janet Scott. New ; bright pink and buff ; very pretty |  |  |  |
|  | Jessie Cuthbertson. Primrose, striped with rose; large hooded form |  | 30 |  |
| 52 | Her Majesty. Beautiful soft rosy pink ; very large flowers |  | 20 | 50 |
| 3753 | Hon. F. Bouverie. Standard flesh-pink; wings rosy buff | - 10 | 20 |  |
| 3754 | Hon. Mrs. Kenyon. A splendid new Eckford variety of extra large size and finest form. The color is described as the deepest shade of primrose found in any variety |  |  | 50 |
| 3755 | Katherine Tracy. Soft, brilliant pin |  | 25 | 75 |
| 3758 | Lady Grisel Hamilton. Light lavender standard and sky-blue wings ; very large flowers of fine form. A splendid new variety | y | 20 | \% |
| 59 | Lady Mary Currie. Orange-pink, shaded rosy lilac . . |  | 20 | O |
| 3760 | Lady Nina Balfour. Very beautiful ma | . 10 | 20 |  |
| 3762 | Lady Skelmersdale. Pale rose-pink standards; wings white, suffused lavend | Io | 20 | - |
| 3763 | Little Dorrit. Pink standard; white wings ; beautiful | - 10 | 20 | - |
| 3764 | Lottie Eckford. Rose and white, edged with blue | ı | 20 | \% |
| 3765 | Lottie Hutchins. Pale primrose, striped with light pink | 10 | 20 | 50 |
| 3766 | Lovely. Deep rose at base of standard and wings, shading to pale pink and blush at edges | d | 20 | 60 |
|  | Maid of Honor. Almost white, with light bluish lavender edge | . 10 | 20 | 60 |
| 3769 | Majestic. One of the best of the new sorts ; flowers very large and of finest form. Standard deep pink, with wings of a somewhat softer rose. Very charming deep pink self-colored. | ¢ Io | 20 | 50 |
| 3770 | Mrs. Dugdale. Beautiful deep rose ; unexcelled for cut-flowers | ıо | 20 | 50 |
| 3772 | Mrs. Jos. Chamberlain. White, striped and flaked with bright rose |  | 20 | 50 |

SWEET PEAS, NAMED VARIETIES, continued<br>All five cents per packet

3774 Mont Blanc. The earliest of all and by far the best for forcing in greenhouse. It is of very dwarf habit, seldom growing over 2 feet, and beginning to flower when only I foot high. The flowers are pure white, of finest form. .. Per oz. Per $1 / 4 \mathrm{lb}$. Per lb. very blue ; the best dark blue yet introduced
\$0 I5 \$0 $30 \quad \$ 100$
3775 Navy Blue. Bluish purpie standard; navy blue wings. New and distinct;
3776 Oriental. Bright pink, suffused with orange and primrose

| 10 | 20 | 50 |
| :--- | :--- | :--- |
| 10 | 20 | 50 |

Othello. The most effective of the dark sorts, the color being a very rich, deep, glossy maroon self, which contrasts most effectively with all other kinds. The flowers are extra large and of elegant form
3778 Ovid. Standard and wings rosy pink, margined rose .
50
3779 Peach Blossom. Salmon-pink standards; soft pink wings 50
3780 Pink Friar. White, delicately suffused with carmine-rose 60
378 I Prince Edward of York. Cerise standard and crimson wings. Large open form and vigorous vine
3783 Princess Beatrice. Delicate blush pink, marked with deeper shades
50
3784 Princess of Wales. Striped mauve on white ground 50
3785 Queen Victoria. Light primrose-yellow 60
3786 Royal Robe. Delicate pink standard ; wings soft blush pink 50
3788 Royal Rose. Fine deep rose-colored 60
3789 Sadie Burpee, White Seed. The largest pure white Sweet Pea 50
3790 Sadie Burpee, Black Seed. Pure white; hardier than the white-seeded . 50
379 I Salopian. Splendid brilliant scarlet ; best of all 50
3793 Sensation. White, suffused with faint rose 50
3794 Shahzada. Dark maroon, shaded purple 50
3795 Stella Morse. Primrose, flushed pink ; very beautiful
3795a Sue Earl. New. Very pretty primrose, edged with mauve 75
3796 Venus. Salmon-buff ; standard delicately sha led with rosy pink

## SWEET PEAS IN MIXTURE



## DWARF CUPID SWEET PEAS

An entirely distinct race of Sweet Peas, growing only about 6 inches high. Of very compact, neat, bushy habit, and with flowers as large and fragrant as those of the tall sorts. Excellent for pots, borders or masses.
3804 Apple Blossom. Bright pink and blush, finely shaded Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.

3805 Beauty. Rosy white, suffused carmine; very pretty \$0 1o \$0 25 \$0 75
3806 Captain of the Blues. Splendid deep blue color
 75

3808 Mauve Queen. Rich mauve on primrose ground . $25 \quad 75$
3809 Royalty. Rich, deep rose-pink, self-colored . . . . . . . . . . . . . . . . $10 \quad 2575$
3810 White. Large pure white flowers ; very floriferous . . . . . . . . . . . . . $10 \quad 2575$
All five cents per packet.

## PERENNIAL PEAS AND OTHER SPECIES

(Lathyrus latifolius, Etc.)
These have not the fragrance of Sweet Peas, but bloom through a long season, are perfectly hardy and will live for years. They make a beautiful screen for rocks, stumps, fences, stony banks, etc. Height, 2 to 8 feet.
38 r 2 latifolius, White (hP). Valuable for cut-flowers in midsummer; 4 to 8 ft . . . . oz., 30 c . . . pkt., 5
38ı3 " Scarlet. Brilliant-flowered ; perhaps the handsomest form of the type . . oz., 3oc. . . 5
3814 " Pink Beauty. Blossoms white, veined, edged and shaded rose-pink . . ." 30 oc . . 5
3815 " Mixed Everlasting Peas. 6 to 8 feet . . . . . . . . . . . . . . . . . ." 30c. . .
3818 Lord Anson's Blue (hA). Strong-growing ; dark purple-blue ; 3 to 5 ft . . . . . ." ${ }^{2} 5 \mathrm{c}$. . . 5
3820 rotundifolius (Persian Everlasting Pea) (hP). Low-growing ; flowers copper-red; does best in a shaded situation

## VERBENA HYBRIDA

In rich soil single plants of this pretty annual creeper, flowering the first season, will carpet a space 3 to 4 feet in diameter with neat foliage and scores of fine flower-umbels. For beds, borders, mounds, vases and window-boxes it is particularly fine, and is frequently used for an undergrowth to tall plants like lilies. Plants raised from seed are not only cheaper, but more vigorous, producing more and larger flowers for a longer season than those grown from cuttings. Moreover, seedling Verbenas are often fragrant, particularly among the white and blue sorts. For early spring bloom, sow the seeds under glass in February ; for later flowers, sow in March or April. Soak the seed a few hours in tepid water and sow in seed-boxes filled with light, rich soil, cover one-fourth of an inch deep, press down firmly, and water sparingly. When the seedlings are about an inch high, transplant into other boxes. Use a liberal amount of manure in the beds that are to receive them, and plant out ro to 15 inches apart each way in May. Give a sunny position. The plants bloom from early summer until frost. Our seed is saved from very fine named varieties, and will produce healthy plants, with flowers of fine colors.
3840 Scarlet. Fine bedder ..... pkt., 10
3841 Defiance. Intensely brilliant scarlet, fine for bedding ..... Io
3842 Blue-Black, White Ege ..... 10
3844 Yellow. Primrose color ..... 10
3845 Golden-leaved (Cloth of Gold). Bright yellow foliage and flowers of various colors ..... Io
3847 candidissima. Large trusses of purest white flowers ..... Io
3848 auriculæflora. Brilliant flowers of fine size, each with a large white eye ..... Io
3850 Italica striata. Brightly striped ..... Io
3851 cœrulea. Bright blue in various shades ..... Io
3853 Mixed ..... 5
3854 Finest Mixed. Extra choice ..... Io
3856 Mammoth Mixed. Plants and flowers are unusually large ; the strain is extremely floriferous and the colors splendid ..... Io
Collection, including 6 varieties Verbena ..... 50
LEMON VERBENA
(Verbena citriodora, Aloysia)

An attractive greenhouse shrub, grown for the delightful citron scent of its light green leaves. It is sasily grown from seed and becomes quite tall with age, but is usually pruned back to a pretty bush form.

3860 Sweet-scented Verbena
pkt., 10

## ZINNIA

( Youth and Old Age)
Few flowers are so e sily grown from seed sown in the open ground, or bloom so abundantly and continuously through the entire season as this hardy annual. Marvelous improvements have been wrought in the newer strain . During the month of August Zinnias are almust incomparably bright. We recommend a free use of them for groups, beds, borders, garden lines and summer hedges. Sow seed in the open ground eari, in spring. Average height, $1 / 2 / 2$ to 2 feet. The collections offered below are choice.

TALL DOUBLE. Showy large flowered; beautiful for borders and gic ups; a feet.

DWARF DOUBLE VARIETIES, continued
3892 Scarlet "Fireball." Dazzling fiery
scarlet . . . per oz., 75c. . pkt., 10
3894 Bright Scarlet …..per oz., 50 cc . 5
3895 White "Snuwball". . "" 75c. . 1о
3896 Yellow, Sulphur . . . " 50c. . 5
3898 " Golden . . . . " 50c. . 5
3902 Mixed . . . .. . . " 40 c . . 5
3904 Lilliput, Scarlet Gem . . . . . . . . 10
3905 "A White . . . . . . . . . . 10
3906 " Mixed ............ 1о
3908 Tom Thumb Mixed. Dwarfs about 6
inches high. Beautiful for beds,
edgings and cuttings. per oz., \$1. 1о
3910 Haageana. Yellow; ift. ." \$1. Ic
3912 Curled and Crested, Mixed. Long
petals, gracefully curled and
crested
Collections of Zinnia, including-

    in varieties Tall Double ..... 50
    Io varieties Tall Double ..... 40
8 " Dwarf Double ..... 50

For Greenhouse Flower Seeds and many other rare and valuable Annuals and Perennials, see pages of to 121.

# General List of Flower Seeds 

## Flower Seeds delivered free by mail on receipt of the stated price

## EXPLANATION OF THE SIGNS EMPLOYED IN THIS LIST

The asterisk $\left({ }^{*}\right)$ designates ornamental-leaved plants. This mark ( $\ddagger$ ) prefixed indicates the climbers.
The third column presents in figures the comparative time of flowering, thus:
1 designates early-blooming in spring and early summer. 2 designates intermediate-blooming in midsummer. 3 designates late-blooming in late summer and autumn.
The fourth column gives the duration or character, and hardiness.

| A represents | Annual-lasting but one | S represents Shrubs-plants of bushy habit. |
| :---: | :---: | :---: |
| B | Biennial-lasting two years. | g " greenhouse plants. |
| P | Perennial-lasting three or more years. | Bu 6 bulbous plants. |
| E " | Evergreen-retaining foliage the entire year. | designates, in every case, |

As a large number of 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 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 represents half-hardy-plants that require to be forwarded in pots or frames. $t$ represents tender-requiring protection.






|  | NUMBER AND NAME 4 oz. at oz. rate only on articles quoted at \$1 per oz. and over. | Time of <br> Flowering | Hardiness and Duration | Color of the Flower | $\begin{aligned} & \text { Height } \\ & \text { In } \\ & \text { Feet } \end{aligned}$ | $\begin{gathered} \text { Price } \\ \text { per } \\ \text { Packet } \end{gathered}$ | GENERAL OBSERVATIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 4490 \\ & 4492 \end{aligned}$ | Carduus Benedictus <br> *Marianus <br> Carnation | 2 | hA | yellow | . ${ }^{2}$ | $\begin{array}{r} \text { cts. } \\ 5 \\ 5 \end{array}$ | $\left\{\begin{array}{l} \left\{\begin{array}{l} \text { (Blessed Thistle.) C. Mari- } \\ \text { amus has large, variegated } \\ \text { leaves; fine for edging. } \end{array}\right. \\ \text { See page } 72 . \end{array}\right.$ |
| 4498 | Cast:lleia indivisa <br> Castor Oil Plant | 23 | †hhP | b. red | $11 / 2$ | 25 | $\begin{aligned} & \left\{\begin{array}{l} \text { Ornamental plants, with beauti- } \\ \quad \text { ful bracts. Brilliant crimson. } \end{array}\right. \\ & \text { See Ricinus. } \end{aligned}$ |
| $\begin{aligned} & 4504 \\ & 4506 \end{aligned}$ | Catananche alba cœrulea |  | $\begin{aligned} & \mathrm{hA} \\ & \text { thP } \end{aligned}$ | white blue | 2. | 5 | Everlasting flowers. Bright \} colors and free-flowering. |
|  | Catchfly |  |  |  |  |  | See Silen |
| 4510 | Cedronella cana |  | hP | purple | 3 | 5 | Purplish crimson flowers. |
| 4512 | Celosia Huttoni (dark foliage) . | 3 | tA | claret |  | 5 | Fine for vases ; splendid foliage |
| 4513 | Thompsoni. Feathered | . . | . . | crimson |  | 10 | plants. No 4514 is an im- |
| 4514 | -magnifica, Improved . |  |  | var. |  | 25 | proved strain with splendid |
| 4519 | Pyramidal red, scarlet-tipped. |  | . . | r. \& Sc. |  | 10 | plumes in all the best shades |
| 4522 | Ostrich Feather Crimson . . | . . |  | crimson |  | 10 | of color. The flowers of 4524 |
| 4523 | --Orange |  |  | orange |  | 10 | are silvery white at top with |
| 4524 | spicata. Fine novelty |  | . . | gr.\&wh. | $21 / 2$ | 25 | lower half bright green. |
|  | Celosia crista |  |  |  |  |  | See Cockscomb, page 75 |
|  | Centaurea |  |  |  |  |  | age 74 . |
| 4528 | Centauridium Drummondii | 2 | hA | yellow | 1 $1 / 2$ | 5 | Pretty little Composite. |
| 4534 | Centranthusmacrosiphon . . per oz., 3oc. | I 3 |  | red | I | 5 |  |
| 4535 | -albus . . . . "، 30 c . | . . |  | white |  | 5 | nuals, suitable for rockeries |
| 4536 | -nanus . . . " ${ }_{\text {- }} \mathbf{3 0 c}$ | - - | - | red | 1/2 | 5 | and vases. |
| 4537 | -Mixed . . . " 30 c . |  |  | mixed | 1 | 5 |  |
| 45 | Centro | I 2 | hP | var. | 8 | 10 | ea." Very pretty. |
| 4543 | Cerastium tomentosum | 23 | $\dagger \mathrm{P}$ | whit | trai | 25 | Fine edging plants ; pretty. |
| 4546 | Cerinthe retorta . . per oz., | - . | hA | yellow | I $1 / 2$ | 5 | aluable for bees. |
| 4548 | Chamæpeuce | - . | h |  | 2 | 5 | ishbone Thistle. Decorative. |
| 4550 | Chelone barbata coccinea . . . | 3 | thhP | purple |  | 5 | \}Very pretty ; bright color. |
| 4551 | -hybrida, Mixed. per oz.,50c. | . . |  | mixe |  | 5 |  |
| 4556 | Chorizema varium | 13 | gS | scarlet | 3 | 25 | fine greenhouse plan |
|  | Christmas Rose |  |  |  |  |  |  |
|  | Chrysanthemums |  |  |  |  |  | 74 and 75. |
|  | Cineraria hybrida- |  |  |  |  |  |  |
| 4562 | White ${ }^{\text {- }}$ - | I | tgP | white | 2 | 25 |  |
| 4563 | Azure Blue . . . . . | - . |  | blue | . . | 25 | Among the most ornamental |
| 4564 | Crimson, Large-flowered | - |  | crimson | . . | 25 | and useful of greenhouse |
| 4565 | Antique Rose, Large-fl'd. - | - |  | rose | . | 25 | plants; very beautiful and |
| 4566 | Blood-Red, Large-flowered . |  |  | d. red | . . | 25 | showy, the colors being dis- |
| 4570 | Splendid Mixed . $\dot{\sim}$. . | - . |  | mixed | . . | 25 | tinct and bright. Nos. 4571 |
| 4571 | - -Large-fl'd. Half Dwarf . | - |  |  | 1 | 50 | and 4572 are magnificent |
| 4572 | - Large-flowered Prize | - . |  |  | 2 | 50 | large-flowered prize strains. |
| 4574 | - Double | 2 |  | - - |  | 75 |  |
| 4578 | Cineraria maritima . per oz.,40c. |  | hhP | yellow |  | 5 | naritima is the popular Dusty Miller." C. stellata |
| 4579 | candidissima . " 50c. |  |  | yelow |  | 5 | is a fine new strain with |
| 4580 | stellata (polyantha) | -• | gP | vars. |  | 25 | small flowers. |
|  | Clarkia |  |  |  |  |  | See page 75. |
| 4585 | Clary, Purple-top . per oz., 25c. | 12 | hA | purple |  | 5 | (Salvia Horminum.) Odd but |
| 4586 | Red-top . . . . "، 25 C . | . . | - . | red | $\dot{\square} \dot{\square}$ | 5 | pretty flowers. |
| 4587 | White-top . . . " 25 c . | -• | - - | white | $11 / 2$ | 5 |  |






|  | NUMBER AND NAME <br> $1 / 4$ oz. at oz. rate only on articles quoted at \$1 per oz. and over. | Time of Flowering | Hardiness and Duration | Color of the Flower | $\begin{aligned} & \text { Height } \\ & \text { In } \\ & \text { Feet } \end{aligned}$ | Price per Packet | GENERAL OBSERVATIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5058 | Gamolepis tagetes | 1 | hhA | yellow | 3 | $\begin{array}{r} \text { cts. } \\ 5 \end{array}$ | Fine for beds. |
| 5062 | Gardenia Thunbergii | - . | gS | wh | 2 | 25 | lowers very fragrant. |
| 5066 | Gardoquia Betonicoides . | 3 | thhP | purple | I 1/2 | 5 | Worthy of cultivation. |
| 5070 | Gaura Lindheimeriana . oz., 40c. |  | hP | W. \& r | 3 | 5 | Very effective in clumps. |
| 5074 | Genista Canariensis | 2 | tP | yellow | 2 | 10 | ) Ornamentaland free-flowering. |
| 5075 | Crimson and Gold | . . | hP | cr. \& yel. | 4 | 25 | \} 5075 is a beautiful flowering |
| 5076 | Multiforum album | . . | . . | white | . . | Io | shrub; crimson and yellow. |
| 5078 5080 | Gentiana acaulis cruciata | . . |  | d. blue blue | $1 / 4$ I | Io | $\left\{\begin{array}{l} \text { Fine, showy hardy plants. } \\ \text { Should be in every collection } \\ \text { for the beauty oftheirflowers. } \end{array}\right.$ |
| 5086 | Geranium (Zonale) . . oz., 75c. | I 3 | gP | scarlet | $11 / 2$ | 10 | The most popular of bedding |
| 5087 | Double Scarlet . . . . . . . |  |  |  |  | 50 | plants. For cultural direc- |
| 5088 | sanguineum ; quite distinct |  | hP | purple | I | 50 | $\int$ tions, see page 64. See, also, |
| 5089 | Apple-scented |  | . . | pink | . | 25 | Pelargonium. |
| 5096 | Gesneria macrantha | 1 | gP | scarlet | 1/2 | 50 | Beautiful greenhouse plants, |
| 5097 | Extra Mixed | 2 | . . | mixed |  | 50 | \} with long-tubed flowers. |
| 5102 | Geum Chiloense coccineum pl. |  | hP | scarlet | $11 / 2$ | 5 | Blooms freely for a long time. |
| 5103 | -atrosanguineum fl. pl. |  |  |  | . | 5 | ine for bouquets. |
| 5106 | Gilia Achilleæfolia | I 2 | hA | blue | I | 5 |  |
| 5107 | -alba. |  | -• | white |  | 5 | Free-blooming annual ; fine for |
| 5108 | -rusea . |  |  | rose |  | 5 | beds. Will bloom in any |
| 5109 5110 |  |  |  | var. | 1/2 | 10 | situation, look well on lawns |
| 51II | - alba . |  | $\cdots$ | white |  | 5 | in beds, are good for rock- |
| 5112 | laciniata |  |  | . . | 1/2 | 5 | ries, and can be planted at |
| 5114 | linifolia (for borders) |  |  |  | - | 5 | any season. No. 5109 is of dwarf spreading habit and |
| 5116 | nivalis . |  |  |  | I | 5 | covered with white, rosy or |
| 5118 | tricolor . . | - . |  | tricolo | - | 5 | carmine flowers. |
| 5120 | rosea splendens |  |  | rose | - . | 5 |  |
| 5122 | Mixed . . . . . per oz., 2oc. |  | - - | mixed |  | 5 |  |
| 5128 | Glaucium luteum | 23 | thP | yello |  | 5 | Horned Poppy.) Gray foliage. |
| 5134 | Globularia trichos | 2 | gP | blue | 1/2 | IO | very handsome plant. |
| 5140 | Gloxinia hybrida, Mixed | I 3 | $\dagger \mathrm{g}$ | mixed |  | 50 | Greenhouse plants. They grow |
| 5141 | -crassifolia erect | . . | . . |  |  | 50 | well in a light, rich soil. "De- |
| 5142 | - -horizontalis |  |  |  |  | 50 | fiance" is of an intense, |
| 5143 | -gran lifiora "Defiance" | . . | . . | scarlet |  | 50 | glowing scarlet. "Cyclops" |
| 5144 | - -French Tiger'd and Spotted |  |  | spotted |  |  | and "Goliath" are new varieties. If started inside in |
| 5146 | —Gigantea, "Cyclops" |  |  | car.\& w. |  | 50 | February will bloom in |
| 5147 | - -" Goliath " |  |  | v. \& W. |  | 50 | summer. |
|  | Godetia |  |  |  |  |  | - page 7 |
|  | Golden Feather |  |  |  |  |  | See Pyrethrum, page in6. |
| 5154 | Gomphrena globosa | 23 | hA | red | I | 5 | The Globe Amaranths are |
| 5155 | -alba. | . . | . . | white | . . | 5 | among the most popular of |
| 5156 | -violacea |  |  | violet | . - | 5 | the Everlastings. Their |
| 5157 5158 | -carnea. | - . | . . | pink |  | 5 | round heads of flowers are |
| 5158 5159 | -striata |  |  | striped |  | 5 | also called " Bachelors' But- |
| 5159 5160 | -nana compacta rubra | - | . . | v. red | 1/2 | 5 | tons." An old favorite for |
| 5160 5162 | ---alba |  |  | white | - | 5 | winter bouquets. The best |
| 5162 5164 | -Mixed. |  |  | mixed | I | 5 | soil is a mixture of sandy |
| 5164 | aurea superba Choice Collection, including 6 varieties Globe Amaranth | - | . | orange | . . | 5 30 | loam, stable manure and some silver sand. |
| 5170 | Gourd, Mock Orange | 2 | tA | yellow | 15 | 5 |  |
| 5171 | Egg-shaped |  |  |  | IO | 5 |  |
| 5172 | Apple-shaped |  |  |  | . . | 5 | Excellent for covering ver- |
| 5173 | Pear-shaped |  |  |  |  | 5 | andas or trellis-work, and for |
| 5174 | Onion-shaped | - | - | - . | . . | 5 | training over arbors, fences, |




|  | NUMBER AND NAME <br> $1 /$ oz. at oz. rate only on articles quoted at \$1 per oz. and over. | Time of <br> Flowering | $\begin{gathered} \text { Hardiness } \\ \text { and } \\ \text { Duration } \end{gathered}$ | Color of the Flower | $\begin{aligned} & \text { Height } \\ & \text { In } \\ & \text { feet } \end{aligned}$ | Price <br> per <br> Packet | GENERAL OBSERVATIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5392 | Lavatera trimestris | 2 | hA | red | 2 | cts. | Showy and free-flowering. $L$. |
| 5393 | alba | . . |  | white |  | 5 | arborea has beautifully mot- |
| 5394 | -Mixed . . . . per oz., 30 c . |  |  | mixed | - | 5 | tled foliage. Fine for back- |
| 5395 | arborea variegata |  | hhP | red | 3 | o | grounds. |
| 5397 | Layia elegans | - . | A | y. \& w. | I | 6 | Pretty yellow and white flower. |
| 5398 | Lemon Verbena | 23 | gP | whit |  | 10 | ine ; lemon-scented foliage. |
| 5402 | Leontopodium alpinum | 3 | hP | yello | 1/2 | 25 | Curious; the "Edelweiss." |
| 5406 | Leptosyne maritima . |  | hhA |  | 2 | 10 | $\left\{\begin{array}{c}\text { Beautifully formed flowers and } \\ \text { elegant foliage. } 5407 \text { has }\end{array}\right.$ |
| 5407 | Stillmani |  |  | golden |  | 25 | ( large golden flowers. |
| 5410 | Leptosiphon aureus | 2 | hA | orange | 1/2 | 5 |  |
| 54 II | androsaceus |  |  | blue | I | 5 |  |
| 5412 | -albus |  |  | white |  | 5 | Fine for edging or rockeries; |
| 5413 | carmineus |  |  | carmine |  | 10 | blooms in masses. L. car- |
| 5414 | densiflorus | - . | - . | blue |  | 5 | mineus has very beautiful |
| 5415 | -albus . . . . . . . . . . |  | - . | white |  | 5 | carmine flowers. |
| 5418 | hybridus | I 3 |  | mixed |  | 5 |  |
| 5422 | Mixed . . . . . per oz., 40 c . |  | . . | . . |  | 5 |  |
| 5434 | Limnanthes Dougla | 23 |  | w. \& y |  | 5 | Free-flowering and fragrant. |
| 5438 | Linaria bipartita alba | 2 |  | white |  | 5 |  |
| 5439 | -splendida | 23 |  | purple | , | 5 | Snapdragon-shaped flowers d desirable for edging, and |
| 5440 |  |  | hP | rose | $\stackrel{3}{3 / 4}$ | 5 | very good for rockwork. |
| 5444 | Cymbalaria (Kenilworth Ivy) |  | hP | violet | trail. | 5 |  |
| 5448 | Linum flavum |  | thhP | yellow | 3/4 | Io | (Flax.) Handsome, free-flow- |
| 5449 | grandiflorum rubrum. oz., 20c. |  | hhA | crimson |  | 5 | \} ering plants. Tender kinds |
| 5450 | Lewisii variegatum . " 60c. | I | thP | li. \& w. | 3 | 5 | make pretty pot-plants. |
| 5454 | Lisianthus Russellianus . | 2.3 | gA | bl | I $1 / 2$ | 25 | ine ; like the Gentians. |
| 5458 | Loasa aurantiaca |  | hhA | orange | 6 | 5 | ) Elegant foliage, and flowers |
| 5459 | tricolor . . . . . . . . . . |  | hA |  | 2 | 5 | \} of curious structure. |
|  | Lobelia |  |  |  |  |  | ee page 8 |
| 5464 | Lophospermum scandens |  | tP | d. rose | 8 | 10 | rumpet-shaped flowers. |
| 5469 | Lotus Jacobæus | 1 | gA | d. \& br. | 2 | 5 | retty and interesting. |
| 5470 | ragonolobus . per oz., 20c. | 2 | hA | purple | $3 / 4$ | 5 | (Winged Pea.) |
| 5474 | Love-Lies-Bleeding . . oz., 20 C. |  | - - | crimson | 3 | 5 | $\left\{\begin{array}{c}\text { (Amarantus caudatus.) Grace- } \\ \text { ful, showy flowers; tall habit. }\end{array}\right.$ |
| 5480 | Love-in-a-Mist . . . . oz., 25c. | 12 |  | blue | I | 5 |  |
| 548 r | White Double . . . " 25 C . |  | . . | white |  | 5 |  |
| 5482 | Blue Spanish . . . . " 30 c . | - . | . . | blue |  | 5 | (Nigella.) Curious and orna- |
| 5483 | White Spanish . . . " 30 c . | - . | - . | white |  | 5 | mental; fennel-leaved, easily |
| 5484 | Mixed Spanish . . . " 25 c . |  |  | mixed |  | 5 | grown and hardy. |
| 5488 | Mixed, all sorts . . . " 25 c. |  |  |  |  | 5 |  |
| 5492 | Lupinus Cruikshankii | 23 |  | ar | 3 |  |  |
| 5493 | Hartwegii | . . | - . | b. \& pk. | - . | 5 | annual or perennial plants. |
| 5494 | -albus | . | . . | white | - . | 5 | 5500 grows 5 or 6 feet high |
| 5495 | hirsutus | - . |  | blue | 2 | 5 | has immense racemes of |
| 5496 | -ruber | . |  | rose |  | 5 | lovely dark blue flowers. |
| 5497 | luteus |  |  | yellow | $\dot{3}$ | 5 | Some varieties are charming, |
| 5498 | mutabilis |  |  | var. | 1 | 5 | having spikes of highly col- |
| 5499 | nanus | 13 |  | b. \& v | 1/2 | 5 | ored flowers, silver foliage |
| 5500 | polyphyllus . . . . . . . - |  | hP | blue | 5 | 5 | and good habit. Rich loam |
| 5501 | -Mixed Perennial . oz., 3oc. |  |  | mixed | . | 5 | will produce the finest plants |
| 5502 | subcarnosus |  | hA | white |  | 5 | and flowers. Dwarf species |
| 5506 | tricolor elegans |  | hP | O. \& ro. | 3 | 5 | make best bedding plants. |
| 5510 | Mixed Annual . per oz., 2oc. Choice Collection, including 12 best varieties |  | hA | mixed | 3 | 5 | make best bedding plants. All are free-flowering, attractive, bright, easily grown. |
| 55i6 | Lychnis Chalcedonica | 12 | hP | scarlet | 2 | 5 | Brilliantly colored border |
| 5517 | -alba. |  |  | white |  | 5 | plants ; 5519 is a superb va- |
| 5518 | -Mixed . . . . per oz., 40 c . |  |  | mixed | - . | 5 | riety, and the original of the |
| 5519 | fulgens . | I | tP | scarlet | I | 10 | aageana hybrids, which in- |
| 5520 | Haageana hybrida |  | hP | mixed |  | 10 | clude the choicest flowers. |


delphinium hybridum, double (See page 78)
mimulus cupreus (See page 113)

gaillardia grandiflora fol. aureo-variegatis (See page io7)


Salvia argentea (See page 9I)

|  | NUMBER AND NAME <br> $1 / 4$ oz. at oz. rate only on articles quoted at \$1 per oz. and over. | Time of <br> Flowering | Hardiness and Duration | Color of the Flower | $\begin{aligned} & \text { Height } \\ & \text { In } \\ & \text { Feet } \end{aligned}$ | $\begin{aligned} & \text { Price } \\ & \text { per } \\ & \text { Packet } \end{aligned}$ | GENERAL OBSERVATIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5526 | Madia elegans . . per oz., 40 c . | 2 | h. ${ }^{\text {a }}$ | yellow | 2 | $5$ | $\left\{\begin{array}{l} \text { Handsome flowers; should be } \\ \text { in a shady position. } \end{array}\right.$ |
| 5530 | Malope grandiflora rosea |  |  | rose |  | 5 |  |
| 5531 | -alba | . . |  | white | . . | 5 | Mallow-like flowers; very |
| 5532 | -rubra . . . . . . |  |  | re |  | 5 | tty. Sow early. |
| 5533 | -Mixed . . . per oz., 20c. . |  |  | mix | - . | 5 |  |
| 5535 | Malva miniata |  | tA | scarlet | 4 | 5 | IM. miniata advertised as 'Sun- |
| 5536 | chata rosea |  | $\dagger \mathrm{P}$ | rose | 2 | 5 | \} set Plant.'' 5536 and 5537 are |
| 5537 | -alba . . . . |  |  | white | . | 5 | n |
| 5540 | $\ddagger$ Mandevillea suaveolens Marigold |  | gP |  | 10 | 10 | $\left\{\begin{array}{l} \text { Beautiful greenhouse climbers, } \\ \text { very fragrant. } \\ \text { See page 8I. } \end{array}\right.$ |
| 5546 | Martynia Craniolaria | - | hhA | w. \& Sp. | I $1 / 2$ | 5 |  |
| 5547 | proboscidea . . per oz., 30c. |  |  | vio. sp. | . | 5 | Curious and very handsome |
| 5548 | lutea |  |  | yellow |  | 5 | plants for the border. |
| 5549 | formosa |  |  |  |  | 5 |  |
|  | Marvel of Peru |  |  |  |  | - | \%. |
| 5554 | Matricaria eximia plena |  | hA | white | 2 | 5 | (Feverfew.) Pretty and neat; |
| 5555 | "capensis plena ${ }^{\text {cheld }}$ ( ${ }^{\text {a }}$ |  |  |  |  | 5 | small double flowers. |
| 5556 | olden Ball" (beautiful) | . |  |  | I $1 / 4$ | 25 |  |
| 5560 | Mathiola bicornis |  | hhA | white | 1/2 | 5 | \{Very fragrant at night, but closing during the day. |
| 5566 | Maurandya antirrhiniflora . | 13 | $\dagger \mathrm{g}$ | purple | 10 | 10 |  |
| 5567 | Barclayana . . . . . - | . . | . . | bl. \& w. | . . | 10 | Abundant bloomers, and very |
| 5568 | alba |  |  | white |  | Io | desirable for the greenhouse |
| 5570 | Emeryana rosea . . |  |  | rose |  | 10 | and garden. Should be in |
| 5572 | purpurea grandiflora |  |  | purple |  | 10 | very collection. |
| 5574 | Mixed | - . |  | mixed |  | Io |  |
| $\begin{aligned} & 5578 \\ & 5582 \\ & 5586 \end{aligned}$ | *Melianthus major |  | gP | brown |  | 10 | as very ornamental foliage. |
|  | Melilotus cœrulea . per oz., 3oc. | 3 | hP | blue | I 1/2 | 5 | Ornamental; like the Lotus. |
|  | Melothria scabra |  | hhA | 1. blue | 10 | 10 | Tropical vine. |
| 5590 | Mesembryanthemum tricolor | I | tA | tricolor | 1/2 | 5 | Beautiful dwarf edging plants ; |
| 5591 | -album |  |  | white |  | 5 | flowers profusely in dry and |
| 5592 | cordifolium variegatum |  | tP | yellow | - . | 25 | sunny situations. Fine for |
| 5594 | crystallinum . . per oz., 50 c . | 23 | tA | white | . . | 5 | pots. 5594 is the "Ice Plant." |
| 5600 | Mignonette . . . . . . . . . . |  |  | $k$ | 3/4 | 5 | See page 82. (Sensitive Plant.) Very odd. |
| 5604 | Mimulus cardinalis | I 2 | the | scarlet | I $1 / 2$ | 10 | (Monkey Flower.) Showy. |
| 5605 | cupreus | 13 | hA | mixed |  | 10 | musk-scented and free-flow- |
| 5606 | Rœzlii . | 23 |  | yellow | 1/2 | 25 | ering. Hardy kinds are well |
| 5608 | tigrinus . . . . per oz., \$1.50 | I 3 |  | spotted | I | 10 | suited for borders. Any soil |
| 5610 | -grandiflorus . . . . . . |  |  |  |  | 25 | suits. See Musk Plant. |
| 5614 | Mina lobata |  | tA | h. | 15 | 10 | Curious ; free bloomers. |
|  | oluc | 23 | hP | ro | 7 | 25 | $\left\{\begin{array}{l}\text { A splendid new Shell-flower, } \\ \text { with very fine foliage. }\end{array}\right.$ |
| $\begin{aligned} & 5622 \\ & 5623 \\ & 5624 \\ & 5625 \end{aligned}$ | Momordica balsamina |  | hhA | yellow | Io | 5 | Handsome ornamental gourds. |
|  | Charantia |  |  | \% | . . | 5 | 5622 is the Balsam Apple: nd |
|  | Elaterium |  | - . | . . | . | 5 | [ 5623 is the Balsam Pear. 5624 |
|  | involucrata |  |  | - . |  | 25 | is the Squirting Cucumber. |
|  | Monk's-Hood |  |  |  |  |  | ee Aconitum |
|  | Moon-Flower |  |  |  |  |  | ee Ipomoea Mexicana. |
|  | Morning Glory |  |  |  |  |  | See pages 80 and 82. |
|  | Mourning Bride |  |  |  |  |  | See Scabiosa. |
| 5632 | Mukia scabrella | 3 |  |  | -• | 10 | Handsome ornamental gourd. |
| 5636 | Musa ensete . . 100 seeds, \$1.50 | 12 | gP | y. \& br. |  | 25 | $\left\{\begin{array}{c} \text { (Abyssinian Banana.) } \\ \text { did tropical plant. } \end{array}\right.$ |
| 5639 | Musk Plant. | I 3 | tA | yellow | 1/2 | 10 | \}Musk-scented Mimulus. |
| 5640 | New Compact | . . | . | . . | 1/3 | 10 |  |
|  | Myosotis . . . Nasturtium . |  |  |  |  |  | See Forget-me-not, page 79: See page 84. |



|  | NUMBER AND NAME <br> $1 / 4$ oz. at oz. rate only on articles quoted at $\$ 1$ per oz. and over. | Time of Flowering | Hardiness and Duration | Color of the Flower | $\begin{aligned} & \text { Height } \\ & \text { In } \\ & \text { Feet } \end{aligned}$ | Price <br> per <br> Packet | GENERAL OBSERVATIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 5775 \\ & 5776 \end{aligned}$ | Persicaria, Red White <br> Petunia | 3 | hP | red white | 11/2 | $\begin{array}{r} \hline \text { cts. } \\ 5 \\ 5 \end{array}$ | Showy for backgrounds. See page 86. |
| 5780 5782 | Phacelia congesta | . ${ }^{2}$ | hA | pur.-bl. <br> d. blue |  | 5 | Excellent for bees. P. Parryi is a beautiful rich, deep blue. |
| $\begin{aligned} & 5788 \\ & 5790 \end{aligned}$ | $\ddagger$ Phaseolus Caracalla multiflorus. | 23 | hhA | lilac scarlet | 5 15 | 10 5 | Curious fragrant flowers. (Scarlet Runner Bean. ) |
|  | Phlox |  |  |  |  |  | page 8 |
| 5796 | Phormium tenax |  | gP | white | 6 | 10 | ew Zealand Flax. |
| 5802 | Phygelius capensis |  |  | scarl | 3 | 25 | Showy greenhouse perennial. |
| 5806 | Physalis loba |  | hP | violet | I | 10 | (Ground or Winter Cherry. $P$. |
| 5807 | Francheti | - . | $\dagger \mathrm{hP}$ | scarlet | 2 | 10 | $\{$ tal new variety from Japan. |
| 5812 | Picotee, White Ground |  | hhP | w. \& sp |  | 50 | From show varieties. Very |
| 5813 | Yellow Ground |  | . . | y. \& Sp. |  | 50 | rich and beautiful, and finely |
| 5815 | Extra Fine Mixed |  |  | mixed |  | 50 | [ perfumed; few flowers are |
| 5818 | Mixed |  |  |  |  | 10 | more attractive. |
|  | Pink (Dianthus) |  |  |  |  |  | See page 88. |
| 5824 | Pi | 12 | gp | w | 3 | 5 | andsome greenhouse shrub. |
| 5828 | Platystemon Californicum | 23 | hA | yellow | 1 | 5 | (California Poppy.) |
| 5834 | Platycodon grandiflorum | 2 | hP | blue | 2 | 10 | (Large Chinese Bell-flower.) |
| 5835 | -album | . . | . . | white | - . | Io | $P$. Mariesi is a fine dwarf, |
| 5836 | Mariesi . |  |  | blue | I | Io | dark blue variety. |
| 5840 | Podolepis chrysantha | 23 | hhA | yellow | 1/2 | 5 |  |
| 5842 | affinis . . |  |  | red |  | 5 | Curious and pretty. Does well exposed to the sun. |
|  | Polemonium |  |  |  |  |  | ee Jacob's Ladde |
| 5848 | Polyanthus | 13 | $\dagger \mathrm{hP}$ | mixed |  | ro | Primula.) Fine varieties. |
| 5849 | Finest . . | . . | . . | -• | - | 25 | From named varieties. |
| 5850 | Gold-laced | . . |  | - . | - . | 25 |  |
|  | Poppy |  |  |  |  |  | See page 89. |
|  | Portulaca |  |  |  |  |  | See page 90. |
| 5856 | Potentilla atrosanguinea |  | hP | purple | 1 $1 / 2$ | 10 | Showy, hardy border plants. |
| 5857 | Mix |  | . . | mixed |  | 5 |  |
| 5863 | Primula cortusoides | 3 |  | red |  | 10 |  |
| 5864 | Cashmeriana |  | . . | rose | 1/4 | 25 | These are the hardy Primroses. |
| 5865 | Japonica . . . . . . . . |  |  | mixed | I | 10 | $P$. Japonica is called the |
| 5866 | farinosa (Bird's-eye Primrose) |  |  | rose |  | 25 | "Queen of Primroses." $P$. |
| 5867 | Forbesi |  | thP | lilac |  | 25 | Forbesi has pretty rosy lilac |
| 5868 | English Yellow Primrose . | - . | hP | yellow | 1/2 | 10 | flowers, and is fine for pots. |
| 5869 | obconica grandifora alba . | 2 | tg P | white |  | 25 | $P$. verticillata has large |
| 5870 | - -rosea | . . | . . | rose |  | 25 | white powdered leaves and |
| 5871 | - -carminea | . . | . | carmine |  | 25 | golden flowers. No. 5874 is |
| 5872 | --hybrida, Mixed | . |  | mixed | . . | 25 | a very beautiful and rare |
| 5874 | sikkimensis . |  | hP | 1. yellow | I | 50 | species. |
| 5876 | verticillata | - . | - . | yellow | . . | 25 |  |
| 5877 | Primula stellata (Star Primula). <br> -White Star |  | gP | white |  | 50 | $\left\{\begin{array}{r} \text { House or conservatory plants } \\ \text { floriferous and long-bloom- } \\ \text { ing. Cut-flowers are valuable } \end{array}\right.$ |
| 5879 | --King of the Star |  | . . | crimson |  | 50 | for table decoration; keep |
| 5880 | -Hybrid Mixed | -• | - - | mixed |  | 50 | fresh in water many days. |
| 5882 | Primula Sinensis fimbriata rubra. | 3 |  | fr. red | $3 / 4$ | 25 | From primus, first, referring to |
| 5883 | - -coccinea |  |  | b. red | . | 25 | their early flowering. The |
| 5884 | - -alba . . . . . . . |  |  | white |  | 25 | Chinese Primroses (Primula |
| 5885 | - -punctata atropurpurea . |  |  | pur. sp. |  | 25 | Sinensis) are fine for winter |
| 5886 | - - cerulea . . . . . | - . | - . | blue |  | 50 | and spring blooming; are |


|  | NUMBER AND NAME <br> $1 / 4$ oz. at oz. rate only on articles quoted at <br> $\$ 1$ per oz. and over. | $\begin{gathered} \text { Time } \\ \text { of } \\ \text { Flowering } \end{gathered}$ | $\begin{gathered} \text { Hardiness } \\ \text { and } \\ \text { Duration } \end{gathered}$ | $\begin{aligned} & \text { Color of } \\ & \text { the } \\ & \text { Flower } \end{aligned}$ | $\begin{gathered} \text { Height } \\ \text { In } \\ \text { Feat } \end{gathered}$ | $\begin{array}{\|l\|} \hline \text { Price } \\ \text { per } \\ \text { Packet } \end{array}$ | GENERAL OBSERVATIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Primula Sinensis fimbriata, con. |  |  |  |  | cts. |  |
| $\begin{aligned} & 5887 \\ & 5888 \end{aligned}$ | - - kermesina splendens - -Mixed | 3 | gP | crimson mixed | $3 / 4$ | 25 25 | free-flowering, and especially valuable for cut-flowers |
| 5889 | - -filicifolia alba |  |  | white |  | 25 | or for house and window cul- |
| 5890 | - rubra |  |  | red |  | 25 | ture ; a cool place suits them |
| 5891 | --Mixed |  |  | mixed |  | 25 | best. The seed is saved from |
| 5892 | - -globosa rubra |  |  | red |  | 25 | the finest colors and largest |
| 5894 | - - -alba |  |  | white |  | 25 | flowers. Seed should be |
| 5896 | --Mixed |  |  | mixed |  | 25 | sown in light soil, but for the |
| 5897 | -New Giant Mixed |  |  |  |  | 50 | final potting a richer soil is |
| 5898 | -plena rubra |  |  | red |  | 75 | necessary, consisting of two |
| 5899 | --alba |  |  | white |  | 75 | parts loam to one each of |
| 5904 | ---Mixed . |  |  | mixed |  | 75 | well-decayed manure and |
|  | Choice Collections, including |  |  |  |  |  | leaf-mould. They require to |
|  | 12 vars. Chinese Fringed |  |  |  |  |  | be well ventilated, well wa- |
|  | 10 " " |  |  |  |  | 25 | ed and slightly shaded |
|  | 8 |  |  |  |  | oo | roughout the summer. |
|  | ، |  |  |  |  | 75 | Collections here offered con- |
|  | 6 " " Double |  |  |  |  | I 25 | tain finest varieties grown. |
|  | Primrose, Evening - |  |  |  |  |  | Enotheras are fine, free-flow- |
| 5910 | Enothera bistorta |  | hA | purple | 2 | 5 | ering plants, best for back- |
| 5912 | -Drummondii. |  |  |  |  | 5 | grounds or shrubbery bor- |
| 5916 | -Lamarckii. | 23 | hB |  | 51/2 | 5 | ders; GE. acaulis has large, |
| 5917 | -rosea Mexicana . oz., 75c. |  | tA | rose | 1/2 | 5 | hining white flowers, quite |
| 5918 | -taraxacifolia alba or acaulis. |  | hA | white |  | 5 | ransparent. OF. Drum- |
| 5919 | -tetraptera . |  |  |  |  | 5 | mondii is of rich sulphur |
| 59205922 | -Mixed Annual . per oz., 30C. |  |  | mixed | diff. | 5 | color; profuse flowering. |
|  | Pueraria Thunbergiana |  | hP | purp | 40 | Io | $\left\{\begin{array}{l}\left(\begin{array}{l}\text { Kudzu Vine.) Beautiful Japan } \\ \text { climber. }\end{array}\right. \\ \hline\end{array}\right.$ |
| 5924 | Pyrethrum atrosanguineum roseum hybridum Double . - -grandiflorum (New) - -Single Mixed Tchihatchewii Parthenium aureum - -selaginoides hybridum - -Golden Gem |  |  | dk. sc. |  |  | No. 5930, known as Golden |
| 5925 |  | $\cdots$ |  | mixe | 2 | 25 | Feather, is fine for edging, |
| 5926 |  |  |  |  | 3 | 25 | and makes a moss-like tuft. |
| 5927 |  |  |  |  |  | 5 | 5932 is a beautiful fern-leaved |
| 5929 |  | 1 |  | white |  | 5 | sort. 5926 is a magnificent |
| 5930 |  | 23 |  | yellow | 1/2 | 5 | new variety with flowers |
| 5932 |  |  |  |  |  | \% | often 4 inches in diameter on |
| 5933 |  |  |  |  |  | 5 | long stems ; fine for cutting. |
| 5938 | Rheum palmatum | I |  | white | 3 | 5 | rnamental Rhuba |
| 5939 | Collinianum |  |  |  |  | 5 |  |
| 5944 | Rhodanthe maculata | 3 | tA | r. \& w. white |  |  |  |
| 5945 5946 | $\begin{aligned} & \text { - Mixa } \\ & \text {-Mixed } \end{aligned}$ |  |  | white mixed |  | $\begin{aligned} & \text { Io } \\ & \text { Io } \end{aligned}$ | ing Everlastings, much |
| 5948 | Manglesi |  |  | r. \& w. | 1/2 | ${ }_{10}$ | prized for winter bouquets. |
| 5952 | Rhododendron arbor | I | hS | mixed | 10 | 25 | and evergreen shrub. |
|  | Ricinus |  |  |  |  |  | See page 90. |
| 5956 | Rivina humilis | 3 | gP | white | 2 | ı | $\left\{\begin{array}{c}\text { Ornamental in fruit. For } \\ \text { greenhouses. }\end{array}\right.$ |
| 5960 | Rocket, SweetWhitecandidissima a . . . . .". . . . . |  | thP | w. \&pur. |  |  |  |
| $\begin{aligned} & 5962 \end{aligned}$ |  | - ${ }_{2}$ |  | white | $11 / 2$ | Io | and very sweet-scented. |
| 5969 | Romneya Coulteri | 23 | hhP |  |  | Io | $\left\{\begin{array}{c}\text { California Tree Matilija Poppy. } \\ \text { Fine fis., resembling a poppy. }\end{array}\right.$ |
| 5974 | Rosa multiflora nana |  | hP | mixed |  | 25 | Flowers first season from seed. |
|  | Rose Campion |  |  |  |  |  | e Agrostemma coronari |
|  | Rose of Heaven |  |  |  |  |  | ee Agrostemma Coeli-Rosa. |
|  | Rose of Sharon |  |  |  |  |  | See Hibiscus Syriacus. |
| 5985985988 | Rudbeckia amplexicaulis superba | 2 |  | ow | 3 |  | lowers, |
|  |  |  |  | .. | . | 5 | whar cone. |
|  | Saintpaulia ionantha | 23 | tgP | blue | 1/2 |  | The Usambara Violet. Lovely violet-like flowers. |




|  | NUMBER AND NAME <br> \% oz. at oz. rate only on artiles quoted at <br> St per oz: and over. | $\begin{gathered} \text { Time } \\ \text { of } \\ \text { Flowering } \end{gathered}$ | Hardines and Duration | Color of <br> the <br> Flower | $\begin{gathered} \text { Height } \\ \text { In } \\ \text { Feet } \end{gathered}$ | $\begin{array}{\|l} \text { Price } \\ \text { per } \\ \text { Packet } \end{array}$ | general observations |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6256 | Tigridia, New Hybrids | 23 | tBu | va | 2 | $\begin{aligned} & \text { is. } \\ & \text { Io } \end{aligned}$ | $\left\{\begin{array}{c}\text { The finest strain ever offered. } \\ \text { Great variety of colors. }\end{array}\right.$ |
| 6262 | To |  | tA | purple |  | 25 | $r$ borders and baskets. 6265 |
| 6263 | -"White Wing |  |  | white |  | 25 |  |
| 6265 | Bailloni |  |  | ye |  | 25 | 6262 is fine for pots. |
| 6269 | Trachelium cœruleum | 2 | thP | biue | 2 | 5 | seful ; border or greenhouse. |
| 6274 | Trachymene cœerulea (Didiscus). |  | gA |  |  | 5 | e |
| 6278 | Trichosanthes colubrina | 3 | gP | white | 4 | Io | Snake-Gourd.) So cal |
| $\begin{aligned} & 6279 \\ & 6280 \end{aligned}$ | coccinea palmata | 2 3 |  | white |  | $\begin{aligned} & \text { 1o } \\ & \text { 1o } \end{aligned}$ | $\}^{\text {a }}$ the shape of its fruit. |
| 6282 | Trifolium suaveolens | 2 | hP | purple | trai. | 5 | An ornamental clover. |
| $\begin{aligned} & 6286 \\ & 6287 \end{aligned}$ | Tritoma uvari MacOwani | 23 | hhP | $\begin{aligned} & \text { or.-red } \\ & \text { r. \& yel. } \end{aligned}$ | 11/2 | $\begin{aligned} & 10 \\ & 25 \end{aligned}$ | $\left\{\begin{array}{r} (\text { Red -Hot-Poker Plant. }) \\ \text { Strong flowering plants } ; \\ \text { have showy spikes of bloom. } \end{array}\right.$ |
|  | Tropæolum |  |  |  |  |  | e pag |
| 6293 | Tunica saxifraga | 2 |  | white | I | 5 | Pretty for rockwork. |
| 6296 | Tydæa hybrida grandiflora |  | gP | mixed |  | 50 | Popular greenhouse plant. |
| 6300 | Valerian | 12 | thB | white | 3 | 5 |  |
| 6304 6306 | rubr |  |  | red |  | 5 | scented flowers. |
| 6310 | Venidium calendulaceum | 23 | hhA | orange | I | 5 | eautiful for borders or pots. |
| 6313 | Venus' Looking-Glass . oz., 25c. | 12 | hA | blue | $3 / 4$ | 5 | (Specularia.) Pretty edging |
| 6314 | White |  |  | hite |  | 5 | plant. 6315 gives about 50 |
| 6315 | Double |  |  |  |  | 5 | per |
| 6316 | Venus' Navelwort (Omphalodes linifolia) | 2 |  |  | I | 5 | A handsome border flower. \} Easily grown. |
| 6320 | Verbascum pannosum |  | hP | yello | 5 | ıо | $\left\{\begin{array}{c}\text { Fine decorative plant. Beauti- } \\ \text { ful white, woolly leaves. }\end{array}\right.$ |
|  | Verbena |  |  |  |  |  | See page 97. |
| 6326 | Verbena (Aloysia) citriodora | 2 | gP | white | 3 | ıо | emon Verbena.) Scented lvs. |
| 6329 | Veronica, Mixed | 2 | hP | mixed | 1/2 | Iо | Pretty for borders ; fine colors. |
| $\begin{aligned} & 6332 \\ & 6334 \end{aligned}$ | Vicia Gerardii fulgens . | 23 | hA | violet <br> d. red | 4 | $\begin{aligned} & \text { 10 } \\ & \text { 10 } \end{aligned}$ | retty pea-shaped flower |
| 6340 | Vinca alba |  | tP | white |  | ı |  |
| 6341 | rosea |  |  |  |  | ı |  |
| 6342 6343 | -alba |  |  | ro. \& w. |  | Io | $\left\{\begin{array}{l}\text { windows and borders or } \\ \text { beds; very pretty. }\end{array}\right.$ |
| 6343 | -Mixed. . . . |  |  | mixed |  | ıо |  |
| 6349 | Violets, Sweet-scented | 12 |  | blue | 1/2 | Io | iola.) All have great beauty |
| 6350 | The Czar |  |  |  |  | 10 | and fragrance. Seed takes |
| 6351 | Wh |  |  | wh |  | ıо | a long time to germinate. |
| 6359 | Viola cornuta, Purple Queen |  |  | purple |  |  |  |
| $\begin{aligned} & 6360 \\ & 6361 \end{aligned}$ | $\begin{aligned} & \text { - Mauve Queen } \\ & \text {-alba. } \end{aligned}$ |  |  | white |  | $\begin{aligned} & \text { 10 } \\ & \text { 10 } \end{aligned}$ | Fine and early-flowering. See Violets. |
| 6365 | Virginian Stock . . per oz., 20c. |  | hA | red |  |  |  |
| ${ }_{6} 366$ | White . . . . '، 20 c . |  |  | white |  | 5 | (Malcolmia maritima.) Early |
| ${ }_{6} 668$ | Crimson King . " ${ }^{\text {a }}$ c. |  |  | crimson |  |  | flowering and fine. |
| ${ }_{6} 699$ | Mixed . . . . " 20 c . |  |  | mi |  | 5 | nowering man. |
| 6375 | Viscaria elegans picta |  |  | Sc. \& w. |  |  |  |
| 6376 6377 | oculata |  |  | rose | 3/4 | 5 | Abundant blooming, hardy annuals, very effective in |
| 6377 6378 | -çerule |  |  | blue white |  | 5 | massing. They are easily |
| 6379 | -Mixed |  |  | mixed |  | 5 | grown, and succeed best in |
| 6384 | Mixed |  |  |  | I | 5 | light, rich loam. |
| 6388 | Wallflower, Brown . . oz., 40c. | 13 | tP | brown | I $1 / 2$ |  |  |
| 6389 6390 | Yellow |  |  | yellow |  | 5 |  |
| 6392 | Harbing |  |  | mix |  | 5 |  |
| 6394 | German |  |  |  |  | fo | colors; useful as spring bed- |



|  | NUMBER AND NAME <br> / oz. at oz. rate only on articles quoted at \$1 per oz. and over. | Time of <br> Flowering | $\begin{gathered} \text { Hardiness } \\ \text { and } \\ \text { Duration } \end{gathered}$ | Color of the Flower | Height <br> In <br> Feet | $\begin{aligned} & \text { Price } \\ & \text { per } \\ & \text { Packet } \end{aligned}$ | GENERAL OBSERVATIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6396 | Wallflower, continued- <br> Paris, Single Annual <br> Choice Collections, including - <br> 12 vars. Double German <br> 8 <br> 6 | I 3 | hA | mixed | I 1/2 | $\left\|\begin{array}{rr} \text { cts. } \\ & 10 \\ \$ 1 & 00 \\ 80 \\ 65 \end{array}\right\|$ | ders. No. 6396 is one of the most valuable of recent introduction, flowering the first season from seed. |
| $\begin{aligned} & 6400 \\ & 6401 \\ & 6404 \end{aligned}$ | Whitlavia grandiflora . oz., 40 oc -alba gloxinioides | $\cdots$ | $\cdots$ | purple white <br> b. \& w. | $\cdots$ | $\begin{aligned} & 5 \\ & 5 \\ & 5 \end{aligned}$ | Pretty bell-shaped flowers; free-flowering. |
| 6408 | Worms (Scorpiurus) | 23 |  | scarlet | I | 5 | eeds are very curio |
| 6412 | Wigandia Vigieri | - . | $\dagger \mathrm{tP}$ | red | 4 | 10 | ine tropical leaves. |
| 6418 | Xeranthemum annuum | 2 | hA | purple | 2 | 5 |  |
| 6419 | -album . . | . . | . . | white | - . | 5 |  |
| 6420 | -multiflorum | . . | - . | purple | . . | 5 | One of the oldest Everlastings; |
| 6421 | - -album |  | . | white | . . | 5 | the flowers retain their color |
| 6422 | -superbissimum fl. pl. Choice Collection, including 6 varieties Xeranthemum | - | . | purple |  | 5 30 | and form longest of all. |
| 6430 6432 | Yucca filamentosa gloriosa <br> Zinnia | 23 | hhP | gr. wh. | 3 4 | Io | $\left\{\begin{array}{l} \begin{array}{l} \text { Very showy, attractive plants } \\ \text { for the subtropical garden } \\ \text { many large white flowers. } \end{array} \\ \text { See page } 97 . \end{array}\right.$ |

## MIXED ANNUALS FOR WILD GARDEN

Bright-colored, summer-flowering, easily grown hardy annuals in the greatest variety for sowing broadcast. Per oz., 10 cts.; $1 / 4 \mathrm{lb} .30 \mathrm{cts} . ; 1 / 2 \mathrm{lb} .55 \mathrm{cts} . ; \mathrm{lb} ., \$ \mathrm{I}$, postpaid.

## 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.

| NUMBER AND NAME <br> Her $1 / 4$ oz. at oz. rate only on articles quoted at \$I per oz. and over. | $\begin{gathered} \text { Time } \\ \text { of } \\ \text { Flowering } \end{gathered}$ | Hardiness and Duration | Color of the Flower | $\begin{aligned} & \text { Height } \\ & \text { In } \\ & \text { Feet } \end{aligned}$ | Price <br> per <br> Packet | GENERAL OBSERVATIONS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 6500 \text { *Agrostis nebulosa } \\ & 6501 \quad \text { pulchella } \\ & 6502 \quad \text { minutiflora } . \end{aligned}$ | 2 | hA | apet. | . ${ }^{\text {I }}$ | cts. 5 5 10 | $\left\{\begin{array}{l} \text { Very fine for vases and bou- } \\ \text { quets. The plumes of } A \text {. } \\ \text { nebulosa are very delicate. } \end{array}\right.$ |
| 6506 *Andropogon argenteus | 3 | hP | -• | 3 | 5 | $\left\{\begin{array}{l} \text { Dense flowers, very silky, with } \\ \text { bright white hairs. } \end{array}\right.$ |
| 6509 Arundo Donax . 6510 *-fol. variegatis |  |  | $\cdots$ | 10 | IO | Subtropical plants of stately ) growth ; ornamental habit. |
| 6515 Avena sterilis | 23 | hA | -• | 3 | 5 | (Animated Oats.) Curious. |
| 6520 Briza geniculata . . . . . <br> 6521 gracilis . . . . . . . . <br> 6522 maxima . . . . . . . . | $\stackrel{2}{.}$ | $\cdots$ | $\cdots$ | I $1 / 2$ | 5 5 5 | $\} \begin{aligned} & \text { (Quaking Grass.) No. } 6522 \text { is } \\ & \text { very pretty for bouquets. } \end{aligned}$ |
| 6528 Brizopyrum siculum | - • | . | -• | $3 / 4$ | 5 | warf species of Spike Grass. |
| 6534 Bromus brizæformis <br> 6535 macrostachys . <br> 6536 madritensis . . | $\cdots$ | hP | $\cdots$ | 3 | 5 5 5 | $\left\{\begin{array}{l} \text { No. } 6534 \text { is very fine for winter } \\ \text { bouquets. To this genus } \\ \text { belongs the Cheat Grass, a } \\ \text { well-known pest. } \end{array}\right.$ |
| 6540 Chloropsis Blanshardiana | - - | tP |  |  | 25 | Dwarf; very fine for edgings. |
| 6544 Chloris barbata vera |  |  |  | I | 5 | $\left\{\begin{array}{c}\text { Elegant for groups, and also } \\ \text { good for baskets. }\end{array}\right.$ |
| 6550 Chrysurus cynosuroides |  | hA |  | I | 5 | Pretty for edgings. |



## COLLECTIONS OF ORNAMENTAL GRASSES

25 varieties Ornamental Grasses, one packet of each

## FERN BALLS (Davallia bullata)

We have imported some of these interesting Ferns from Japan. They are easily grown and occupy little space, being suspended in the room. In the fall the leaves die off, and the plants need a rest for two months, during which time it is recommended to keep them out of doors. The frost does not hurt them, but when taking them in, they should be gradually thawed out. We handle only the long-leaved variety. Price, extra large size, 50 cts. each ; large size, 40 cts . each ; second size, 30 cts . each.

## PALM SEEDS

The Palm seeds we offer are imported direct from approved sources in Australia, New Zealand, South America, Central America and the West Indies, and are unexcelled in quality and purity. Fresh seeds arrive throughout the year, as the various species mature, but the greater number come during the spring and summer. Customers are invited to let us book their orders, to be sent from time to time as fresh shipments arrive.


|  |  |  | t. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cocos Bonnetti |  |  |  |  |  |
| campestris |  |  | 25 |  | oo |
| plumosa . . . . . . . | . 10 |  | 25 |  | oo |
| flexuosa | . 10 |  | 25 |  | oo |
| Weddelliana | . 8 | " | 25 |  | 50 |
| Yatai | 8 | " | 25 |  |  |
| Corypha australis (Cabbage |  |  |  |  |  |
| Palm) ${ }_{\text {drase }}$ | . 10 | " | Iо |  | 25 |
| Dracæna australis | 20 | " | 10 |  | 25 |
| indivisa ${ }_{\text {lineata }}$. . . . . | . 25 | " | ıо |  | 25 |
| " lineata | . 25 | " | ıо |  | 25 |
| Draco . . . . . . . . |  | " | 25 |  |  |
| rubra ${ }^{\text {Veitchii }}$ |  |  | 25 25 |  |  |
| Geonoma Schottiana |  | " | 25 |  |  |
| gracilis |  |  | 25 |  |  |
| Kentia Belmoreana | 12 | " | 25 |  |  |
| Forsteriana . . . . . . . |  |  | 25 |  |  |
| Canterburyana (Umbrella |  |  |  |  |  |
| Palm) . . . . . . . . | . 12 | " | 50 |  | oo |
| Morei |  | " | 50 |  |  |
| Latania Borbonica |  |  | ıо |  |  |
| Musa Ensete (Abyssinian |  |  |  |  |  |
| Banana). - |  | " | 25 |  | oo |
| Oreodoxa regia (Royal Palm). |  | " | 15 |  |  |
| Pandanus utilis (Screw Pine). | . 15 |  | 25 |  |  |
| Phænix Canariensis . . . | . 12 | " | Io |  |  |
| dactylifera (Date Palm) . | . 12 | " | ${ }_{10}$ |  | 50 |
| leonensis . . . . . . . | . 12 | " | Io |  | 75 |
| reclinata | . 15 | " | 25 |  |  |
| rupicola | 10 | " | 25 |  |  |
| tenuis |  | " | 10 |  |  |
| Zanzibariensis . . . . | . 10 | " | 25 |  | - |
| Seaforthia elegans |  |  | I0 |  |  |

In April we shall have Cycas revoluta stems (Sago Palm) in various sizes direct from Japan

# CHOICE COLLECTIONS OF FLOWER SEEDS <br> Free by mail at prices affixed 


 about 3 inches deep and 7 or 8 inches apart. By planting at intervals up to first of July these fine flowers can be had in bloom all through the summer and fall-the later to flower being the best. About end of October, when the leaves begin to wither, the bulb should be taken up, dried in the open air, and then stored in a dry place free from frost for planting next spring.

## VARIOUS MIXED GLADIOLI

|  |  | Doz. | 100 | 1,000 |
| :---: | :---: | :---: | :---: | :---: |
| Mixe | Varieties of Red and Scarlet | \$ 35 | \$150 | \$10 |
|  | White and Light. Standard selectio | 45 | 225 |  |
| " | White and Light. Extra fine for florists' use | 75 | oo |  |
| " | Striped and Variegated | 50 | 275 |  |
| " P | Pink | 40 | 1 75 | 13 |
| " | Yellow and Orange | 60 | 325 |  |
| " | Hybrids. All colors | 35 | 150 |  |
|  | Finest Selected Seedlings. All colors in greatest variety | 40 | 1 75 |  |
| " L | Lemoine's. Fine bright colorings and |  |  |  |
|  | Childsii. ${ }^{\text {odd }}$ markings ${ }^{\text {a }}$ - ${ }^{\text {arge-flow }}$ | 40 | 200 |  |
| " | Nanceanus. A new race, with remarkably large and brilliantly colored flowers | 50 | 300 |  |

Groff's New Hybrids. Splendid new strain embracing thousands of varieties in greatest diversity of colors. Mixed hybrid seedlings, first selection
$75 \quad 4$ oo 30 oo

## FINE NAMED HYBRID GLADIOLI

## Amalthee. Pure white; large violet-red blotch ; velvety <br> Doz.


\$0 I5 striped red-brown .............. Andre Leroy. Deep cherry, flamed and striped darker ; white blotch and stripe
Angele. White; showy and effective
Apollon. Rosy lilac, with a large rose blotch, striped white in the center

Calypso. Flesh-colored rose, streaked Each Doz with rose and blotched carmine . . \$0 $15 \$ 125$
Carmen. Straw-colored, slightly streaked rose-amaranth on the outer, citron-yellow at the base of the inner petals.
Carnation. Fleshy white, tinged at the edges carmine, the lower petals blotched purplish carmine

20

Ceres. Pure white, spotted with purplish rose . . . . . . . per 1oo, \$2.
Christopher Columbus. Very large, rosy carmine flamed red, large violet-red blotch on lower petals
Conquete. Bright cherry-red, pure white blotch, upper petals striped rose
Crepuscule. Splendid spike; flowers lilac-rose, flushed carmine, and with violet on the edges of the petals

0540
$15 \quad$ I 25
$15 \quad 125$
$15 \quad 125$
Daphnis. Finy rosy salmon, flamed slaty violet, blotch white
Diamant. Extra large, fleshy white; throat ivory-white, blotched and streaked carmine
Eldorado. Clear yellow, the lower petals streaked with red
Escarboucle. Dark carmine-red, pure white band and blood-red blotch
Fatma. Ivory-white, striped bright rosy salmon ; violet blotch
Felicien David. Cherry, light carmine feathered white blotch
Feu follet. Well-opened flowers with ivory-white throat, richly tinted and striped with carmine at the edges
Flamboyant. Large, fiery scarlet
Formosa. Large and perfectly shaped spike. Delicate satiny rose, slightly striped with carmine on the edges.
Fra Diavolo. Large, bright orange-rose flowers, flushed violet-red; large yellow blotch
Grandesse. Very large, well-opened flower; petals fleshy white, slightly suffused with fresh lilac. Carmine blotch .
Isaac Buchanan. Very fine yellow . : -
La France. Pure white, flamed carmine toward the edges, large amaranth blotch on creamy white ground
Lamarck (de). Large flowers, cherrycolored, tinted orange, blazed red, large pure white stain
Le Phare. Brilliantfiery red ; very showy.
Le Poussin. Light red, white blotch .
Le Tintoret. Fine cherry-rose, flamed with carmine, carmine blotch on yel-
low tinted ground . . . . . . . low tinted ground


10 100
$15 \quad 125$

20200
$15 \quad 125$

IO I OO
IO I OO
$20 \quad 200$

Leviathan. Large flowers of delicate Each Doz. bright rose, flamed and striped car-
mine ; amaranth blotch . . . . . \$0 I5 \$1 25
Madame Monneret. Delicate rose . .
Matador. Fine spike, with splendid flowers of brilliant carmine-red, striped and blotched pure white . . .
May. Fine pure white, flaked rosy crimson, superb spike. The best of all for forcing in greenhouse - per 1oo, $\$ 4$. Napoleon III. Bright scarlet ; white line in each petal . . . . per 100, $\$ 1.50$. 0540
Neron. Tall spike ; dark crimson, suffused with dark blood-red and violet .
Norma. Pure white, occasionally very slightly suffused with pale lilac
$15 \quad 125$
$20 \quad 200$
Pactole. Beautiful yellow, slightly tinged with rose at the edges, blotch of a darker shade
Pepita. Golden yellow, slightly striped carmine at the edges of the petals . .
Pericles. Light rose, flamed with car-mine-purple, large pure white blotch.
Phebus. Brilliant red, with large pure white and very conspicuous blotch
Professor Maxime Cornu. Compact spike; large flowers of a fine intense bloodred color, streaked vermilion

15 I 25
Pyramide. Handsome spike; large, well-expanded flowers of the brightest and most delicate orange-rose

15 I 25
Reverend Berkeley. Light rose, tinged with violet-carmine, white blotch . .
Rossini. Dark amaranth-red, streaked and blotched white

Io 1 oo

Shakespeare. White, very slightly suffused with carmine-rose ; large rosy blotch. Fine for forcing . . . . .

15 I 50
Snow-White. Superb pure white . . . 20200
Suffren. Flowers fresh, bright cherryrose, blotch carmine, with violet center stripe ; very pretty

Io I oo
Sultana. Bright satin-rose, flamed with carmine, purple-carmine blotch . . ..
$15 \quad 125$
Surprise. Rose-amaranth; very lateblooming variety . . . . . . . . . .
Tigridia. Flowers salmon-yellow, very large and well open, capriciously flamed with rosy carmine

I5 I 25
Titania. Beautiful tall spike, creamy salmon flamed cherry

I5 I 25
Van Dael. Very large flowers of a delicate salmon-rose at the center, streaked with blood-red at the top of petals .

I5

## NEW GIANT CHILDSI GLADIOLI

Very tall and erect, often 4 or 5 feet high, with spikes of bloom over 2 feet long. The flowers are of great substance and of gigantic size, frequently 7 to 9 inches across. Every color known among Gladioli.

Columbia. Light orange-scarlet, Each Doz. blotched and penciled bluish purple. \$o io \$1 oo
Deborah. Dark red, tinged with amaranth; large, pure white throat and blotches, white band through petals
Dr. Sellew. Large spikes and flowers of great substance. Deep, rich, rosy crimson, penciled darker

Io 1 oo
Henry Gillman. Deep salmon-scarlet, with pure white bands through each petal, and throat peculiarly mottled. io 1 oo
Marginata. Fine salmon, with crimson and white throat

Mottled Gem. Beautifully mottled Each Doz. white, violet and scarlet . . . . . \$0 1o \$1 оо
Mrs. Beecher. Rosy crimson ; white throat, marked carmine . . . . ${ }^{\circ}$.
Nezinscott. Blood-scarlet, crimson-black
blotches . . . .
oddity. Amaranth-red, throat mottled
IO I 00 red and white

IO I OO

Splendor. Rose-magenta stain, with purple and white mottling $\cdot$. . .

15 I 25
Torch Light. Scarlet, mottled white . I5 I 25
Wm. Falconer. Enormous size; beautiful clear light pink

10 I 00


## DAHLIAS

## DOUBLE SHOW AND FANCY DAHLIAS

A. D. Livoni. Each Doz. Best clear pink. . . . \$0 15 \$150

A. Pefferhorn. Large; bright crimson ... 15
Arabella. Primrose, shaded gined dark crimson-scarlet

# La France. Soft rosy lavender <br> 15 I 50 

Lady G. Herbert. White, tipped purple . ..... 15
Le Phare. Large, deep red ..... 15
Miss Dodd. Very large, pure yellow ..... 15Olympia. Immense size, with full highcenter; deep rose-pink, striped and pen-ciled rich crimson ; profuse bloomer . .

Pink Dandy. Large; pure pink; full round form; free bloomer, on long stems . . .
Red Hussar. Purest cardinal-red; fine form; on long stems
Saturn. Large crimson-maroon ... 15 I 50
Snow. Snow-white ; large ; early and profuse bloomer

## DECORATIVE DAHLIAS

Eureka. Large to very large; deep rose Each Doz.
color; fine, regular form; quilled petals. Seedling of Grand Duke Alexis . . . \$0 25
Frank L. Bassett. Bright purple, shading to blue; extremely profuse bloomer .. 25250
Grand Duke Alexis. Pure white, distinctly tinged delicate pink

15
I 50
Nymphæa. An exquisite light pink, tinted lighter toward the center

15 I 50
Oban. Large; rosy lavender . . . . . . . . . . . . . . ${ }^{15}$
Perle d'0r. New. Pure white; very best ; large, profuse.. I5
Wilhelm Miller. Brilliant purple ; extremely free, large and distinct
William Agnew. Best crimson-scarlet
15
Zulu. Rightly named the "Black Dahlia"; jet black, changing to black-maroon.

## CACTUS DAHLIAS

Kriemhilde. Beautiful clear pink, tint- Each ing lighter toward the center .. \$0 25 Earl of Pembroke. Bright plum . . I
. 15 I 50
Harmony. Gold to orange-red . . . . I5 I 50

Dach Doz. Lady Penzance. Pure canary-yellow. \$o 15 \$1 50 Mr. Moore. Claret, shading to maroon . 15 I 50 William Cuthbertson. Large soft crimson. I5 I 50

## POMPON DAHLIAS

Alewine. White, flushed rosy lake . \$o I5 Allie Mourey. Very fine; deep pink . . 15 Catherine. Best pure yellow Elifin. Cream, shading to primrose . . Is Fairy Queen. Sulphur-yellow . . . . . 15
Little Diavola. Pink, tipped maroon . I5
Little Herman. Dark red, tipped white.

Doz.
\$I 50
I 50
I 50
I 50
I 50
r 50
I 50

Phili Each Doz.
Philip Freud. Richest orange-salmon. \$o I5 \$I 50
Prince Charming. White, penciled, suffused and heavily tipped purple-pink. I5 Rougiere Chauviere. Delicate crimson, penciled and striped pink and white. 15
Snowclad. Best white . . . . . . . . I5
Sunshine. Best bright red . . . . . . I5

## SINGLE DAHLIAS

20TH CENTURY. The most beau- Each Doz.
tiful of all Dahlias; flowers $4 \frac{1}{2}$ to 6 inches across; brilliant pink, overlaid crimson, tipped white, with white disc around the center, the deep colored zone changing to pure pink. \$0 25 \$2 50 Ami Barrillet. Pure garnet, purple foliage ; distinct and striking . . . . . . 15

Buttercup. New. Bright yellow, tipped Each deeper; extremely profuse bloomer. \$0 25 Fashion. Crimson-maroon; white disc . I5 Gold Standard. Pure yellow . . . . . I5 Mrs. Bowman. Large, brilliant purple . I5 Snow Queen. Fine pure white . . . . I5 White Cross. Rosy lake, white stripe . 20 Wildfire. Pure scarlet

## DWARF LARGE-FLOWERING FRENCH CANNAS

| ase Bouvier. Finest tall brilliant crimson; foliage green. |  |  |  |
| :---: | :---: | :---: | :---: |
| Alsace. Pure sulphur, changing to creamy white. Planted in connection with high-colored sorts it makes a fine contrast ; foliage green. $4 \frac{1}{2}$ feet |  |  |  |
| Austria. Pure canary-yellow ; fine large open flowers, with but few traces of brown dots in the center of the two inside petals. 6 feet . | Io |  |  |
| Black Beauty. Large massive foliage of the richest bronzy purple color shaded black. Where foliage effect alone is desired, nothing richer can be found |  |  |  |
| andale. The best bronze-leaved, with soft currant-red flowers. 4 feet |  |  |  |
| Florence Vaughan. Bright rich golden yellow, spotted with red; of large size perfect form ; foliage green. 4 feet |  |  |  |
| Italia. Bright orange-scarlet, with a deep broad golden yellow border; the flowe which are produced on massive stems about 16 inches long, are set well abo the foliage ; the foliage is large and heavy, similar to that of the Musa Enset |  |  |  |
| Madame Crozy. The flowers of this popular variety are bright crimson-scarlet, b bered with golden yellow. Foliage bright green and very massive. 4 feet |  |  |  |
| mlle. Berat. The nearest approach to a pink. Very effective when planted in junction with yellows and high-colored reds. 4 feet |  |  |  |
| esident McKinley. Brilliant crimson with scarlet shading. 3 feet; foliage green with chocolate margin |  |  |  |
| ueen Charlotte. The finest gilt-edged variety. Bluish green foliage ; large flo of a rich scarlet-crimson, broadly banded with canary-yellow. 3 feet . . |  | I 0 |  |
| obusta Perfecta. Very large, vigorous grower, sometimes io feet high, and with gant foliage |  |  |  |
| venir d'Antoine Crozy. Intense crimson-scarlet, with broad golden border ; foliage green. 3 feet . |  |  |  |
| e Mixed Crozy |  |  |  |

## HERBACEOUS PAEONIES

Beaute Francaise. Nice shaped bloom ; bright clear pink, shaded lightly with lilac at the center

Each Doz.

Duke of Wellington. Very large, well-formed bloom. Habit ideal. Stems very firm and long. Strong grower ; very fragrant. The true variety is quite scarce
Festiva Maxima. Enormous full, double bloom; petalage very broad; color snow-white, with an occasional purplish carmine spot. Vigorous grower, grand habit, splendid strong stems, early bloomer

75
750
Gigantea. This is the finest early pink Pæony that we have for cut-flower purposes. It is one of the earliest to bloom; produces an enormous flower 6 to 7 inches in diameter, on a long stem. Deliciously fragrant. Very effective for decorative purposes
Golden Harvest. Very striking variety, the guard petals being blush pink, with a distinct blush white guard and blush center, a few of the center petals tipped and striped with light crimson. Strong, delicate fragrance. Good grower, vigorous habit .
Mont Blanc. Broad snow-white guard petals, center forming a very full, high cushion ; color creamy yellow, fading to yellowish white when the flower is old
Achille. Fine large bloom, long stem, healthy grower, profuse bloomer. Opens light, flesh-colored pink, finishing blush white, with an occasional creamy spot
Edulis superba. Clear flesh-pink, occasionally slightly traced with carmine .
Humei carnea. Color soft clear rose-pink, large, very compact, deep, full bloom on long stem. Strong cinnamon fragrance. Strong grower. Very late
Marie Lemoine. Medium to large size, well filled, broad-petaled bloom. Color delicate China pink, shading to ivory-white at the tips. Early bloomer. Very fragrant . . . .
Princess Mathilde. Large, well-shaped bloom. Bright vinous pink
$40 \quad 400$

Pulcherrima. Light flesh-pink, fading to flesh-white, center tinted pink and salmon, finishing flesh-white, with a few petals tipped with violaceous pink. Strong, rigid stems . .
Queen Victoria. Large, full, compact bloom, with fine broad guard petals. Opens fleshwhite, center petals tipped with red blotches. One of the best cut-flower varieties . .
Richardson's rubra superba. Large, very full, compact bloom. Color brilliant ruby crimson. It is undoubtedly the latest Pæony that we have .

400

Officinalis mutabilis. Large, well-formed full bloom, opening light Daybreak pink, finishing ivory-white
$505 \infty$

0fficinalis rubra. The old-fashioned, very early, deep crimson Pæony of our grandmothers' gardens. Excellent for early cut-flowers, and nothing more striking for landscape use.

30300
Officinalis rosea. Deep purplish rose; very brilliant and effective

## LILIES

Lilies are easily grown, and require little care. They do best in a light, well-drained soil. Some peat or leaf-mould may be used to advantage. L. auratum cannot bear manure, but thrives in ordinary light soil. They also prefer a partial shade, and the taller sorts must have protection from high winds.

Auratum (Golden-banded Lily). The Each Doz. grandest of all hardy Lilies; flow-
ers white, spotted with maroon,
having a bright yellow band through
each petal.

Auratum pictum. Beautifully spotted dark crimson . . . . . . . . . . . . 30300
Auratum virginale. Large, pure white flowers, with yellow-banded petals . . 45

450
Auratum Wittei. Very large, pure white, with raised spots of satiny white. .
$65 \quad 7$ oo
Atrosanguineum. Crimson, black spots. 25225
Batemanni. Bright apricot . . . . . . I5 I 50
Chalcedonicum. The true Scarlet Turk's Cap Lily. 3 feet

60600
Colchicum. Citron, spotted black . . . 606 oo
Excelsum (Testaceum). Lovely creamcolored flowers, tinged with apricot; very fragrant, elegant and stately. 5 ft .70

Giganteum. A magnificent species, Each Doz. growing 6 to 10 feet high; color white, with purple throat; extra large
\$2 50
Leichtlinii. Orange-red, with crimson spots. 2 to 3 feet . . . . . . . . . I5 \$I 50
Martagon. Scarlet . . . . . . . . . . 25250
Speciosum rubrum Melpomene. Very dark, crimson-spotted flowers of large size. 7 to 9 inches . . per 100, $\$ 10$. I5 I $50^{\circ}$
Thunbergianum grandiflorum . . . . . . 15 I 50
" Kikak. . . . . . . . I5 I 50
" Prince of Orange . . . . I5 I 50
" Van Houttei . . . . . I5 I 50
Tigrinum splendens: Rich scarlet, with black spots ; finest of all Tiger Lilies.

I 00
Tigrinum flore pleno. Double Tiger Lily; bright orange-red, with black
spots. 4 to 5 feet.... . . . . . . 12 I 25
Umbellatum Mixed . . . . . . . . . . I5 I 50

## AMARYLLIS

The most suitable soil is good loam, with one-fourth part of leaf-mould or pulverized manure, and some sand. Good drainage is very important.

| Aulica (Lily of the Palace). Very Each large, handsome flowers, crimson shaded with green . . . . . . . . \$0 75 | Johnsoni (Spice Lily). Crimson, Each striped white . . . . . . . . . . . \$0 60 |  |
| :---: | :---: | :---: |
| Belladonna major. Violet and white ; in large umbels ; fragrant . . . . . $25 \$ 25^{\circ}$ | Longifolia rosea. Rose ; hardy |  |
| Cleopatra. Red, white margin . . . . 350 Josephine (gigantea). Extra size bulbs. 6 oo | Orientalis. Fine; |  |
| ormosissima (Jacobcan Lily). Pretty scarlet flowers ; may be planted outside in the spring | Prince of Orange. Bright orange . . 2 Mixed Hybrids. Splendid. |  |

## TUBEROUS-ROOTED BEGONIAS

Splendid pot-plants for the house or for bedding. For bedding they should be started in hotbed in March and April


## CRINUMS

The most suitable soil is a compost of turfy loam, cow manure and some sand. They should be grown in large pots or in tubs, about three-fourths of the bulb being out of the soil. In late fall they should be removed to a coolhouse and allowed to rest till new leaves begin to appear in February. They may be placed outside when warm weather begins and will flower all through the summer, making splendid lawn or veranda plants.

Giganteum, Giant White. Immense bulbs; large white flowers; blooms all summer; very fragrant ; they should be watered plentifully while growing .
Amabile, Giant Pink. Extra large, bright pink, with white stripe; splendid flower ; enormous bulb. This and the Giant White are unsurpassed for growing in tubs, blooming profusely outside all summer
. $\$ 200$
Each

200

Grandiflorum. Very large white flowers, with Each red stripe through the center of the petals . $\$ 300$
Kirki. Large umbels of beautiful pure white flowers; pure white, with purple stripe.
Powelli. It produces long stems bearing at the top five to eight large, dark rose, bellshaped flowers 3 to 4 inches long.
Powelli album. Pure white . . . . . . . . I oo " intermedium. Light rose ; hardy . . 300

## NEW LARGE-FLOWERED JAPAN IRIS

(Iris Kampferi)
These are of easy culture, requiring very little attention after once being planted. They do best in a light, rich, sandy soil, and in a sunny situation. Good drainage is very important. They require a liberal supply of water when growing. We are importing from Japan a laree supply of the following twenty newest and best of these magnificent Irises, which excel in size, periection of form and richness of color, any ever shown. They come in large, extra-strong clumps.
Gekka-No-Nami (Waves on Moonlight). Dense pure white, yellow blotches; petaloid stigmas creamy
Each Doz. 100

Kumona-no-Sora (Sky Amidst the Cloud). White, with a strongly marked sky-blue zone and mottled in the same shade, yellow blotches; petaloid stigmas white, margined lavender-blue

| 40 | 400 | 25 ¢0 |
| :---: | :---: | :---: |
| 40 | 400 | 2500 |
| 40 | 400 | 25 oo |
| 40 | 400 | 25 о0 |
| 40 | 400 | 2500 |
| 40 | 400 | 25 oo |
| 40 | 400 | 25 oo |
| 40 | 400 | 25 oo |
| 40 | 400 | 25 oo |
| 40 | 400 | 25 00 |
| 40 | 400 | 25 ○0 |
| 40 | 400 | 2500 |
| 40 | 400 | 2500 |
| 40 | 400 | 2500 |
| 40 | 400 | 2500 |
| 40 | 400 | 25 ¢0 |
| 40 | 400 | 2500 |
| $4)$ | 400 | 25 ¢ |
| 40 10 | 400 75 |  |
|  | 75 |  | mo-no Obi (Band of Cloud). Dark lavender-purple, white halo surrounding the

yellow blotches and radiating into strong white lines; large standards same colors ; petaloid stigmas white, tipped and bordered lilac ; handsome flower
$40 \quad 400 \quad 2500$
Ho-o-Jo (Ho-o-Castle). Ruby-crimson, primrose blotches surrounded with white halo radiating out into clear white lines; petaloid stigmas white, tipped purple
Gei-Sho-Ui. Rich, vinous purple, primrose blotches surrounded by a white halo which radiates out into the purple petals ; petaloid stigmas creamy, edged purple
ofu-no-Koi. White, splashed, blotched and speckled sky-blue, primrose blotches radiating into the petals; petaloid stigmas creamy white, tipped violet
Yomo-no-Umi (Boundless Sea). Lavender-blue, with a blue halo surrounding the yellow blotches and radiating out into feathers; petaloid stigmas red-lavender. A distinct and beautiful flower .
akujakuro. Blue and purple, heavily feathered white, yellow blotches; standards blue, edged white ; petaloid stigmas white, tipped blue ; very large petals

4
Momiji-no-Taki (Maple Waterfall). Crimson-purple, suffused and feathered white; petaloid stigmas white and purple
edo-Kagami. Crimson-claret, orange blotches, surrounded with blue halo radiating into veins, feathers and pencilings; petaloid stigmas red-violet. Very large, handsome flowers.
Shimoyo-no-Tsuki (Frost Moonlight). Gray, suffused lavender-blue, yellow blotches, radiating out into pearl-blue feathers ; standards pale purple, edged and stained white ; petaloid stigmas gray, tipped and margined lavender
o-no-Nami. Cœrulean-blue on gray lilac. flaked and speckled, large yellow blotches radiating out in graceful lines ; petaloid stigmas violet, shaded gray
.
Wakamurasaki. Claret-purple, speckled white, orange blotches; petaloid stigmas purple, stained white ; very large flower
Tora-Odori (Dancing Tiger). Gray overlaid with lavender-blue, yellow blotches; petaloid stigmas violet and white .
-
Kuma-Funjin (Excited Bear). Purple, overlaid with navy-blue ; 2 standards; petaloid stigmas purple and blue, very large orange blotches.
.
Uchiu. Cœerulean-blue, yellow blotches, surrounded with white halo radiating out into broad lines; 3 thin white standards tipped blue; petaloid stigmas white .
Kumo-isho. Vinous-purple, margined gray, yellow blotches surrounded with velvety crimson halo, radiating into the petals in feathers and pencilings ; petaloid stigmas dark violet
Kumo-no-Uye. Purple, with a sky-blue halo surrounding the primrose blotches and shading into the purple petals; petaloid stigmas purple, very double

75
$\circ$
Yezo-Nishiki (Yezo-embroidery). Deep rich crimson, mottled and blotched white; standards same color as petal ; petaloid stigmas lavender-blue
Sano-Watashi. Pure white, yellow blotches; petaloid stigmas creamy white ground
Mixed Common Japan Iris, Single and Double. Not large-flowered

## HARDY PHLOX

For hardy clumps of brilliantly colored masses of flowers on the lawn or among the shrubbery, Hardy Perennial Phlox takes the very first rank. The great showy heads of bloom are produced in gorgeous profusion, from midsummer until checked by frost.


## MONTBRETIAS

Hardy summer-flowering, bulbous plants that are becoming more popular every year. They should be planted in groups and left undisturbed. Ordinary garden soil and a sunny position suit them.

| Bouquet Parfait. Large, bright E vermilion flowers, with deep yellow center . . . . . . . \$o | $\begin{array}{cc} \text { Doz. } & \text { 100 } \\ \$ 045 & \$ 2 \end{array}$ | Elegans. Bright yellow, out- Each side streaked with vermilion; fine. \$0 05 |  | 100 |
| :---: | :---: | :---: | :---: | :---: |
| Crocosmiæflora. Large ; bright orange, tinged scarlet . . . . o5 |  | Etoile de Feu, Bright vermilion, with deep yellow center ; large |  |  |
| Drap d'Or. Rich yellow ; very |  | flowers. . . . . . o8 | 5 |  |
| large, handsome flowers . . . os | 40200 | Golden Sheaf. Bright yellow . . 05 | o |  |
| Eldorado. Large, golden yellow flowers; very foriferous; dwarf o5 |  | Pottsii, Orange and scarlet; very |  |  |
| flowers; very floriferous; dwarf o5 | 4020 | free-flowering . . . . . . . . 05 | 25 |  |

## TIGRIDIAS

These very handsome summer-flowering bulbs should be planted in the spring. They will flower profusely all summer. The plants grow about 2 feet high, with large and finely colored flowers.


## Miscellaneous Bulbs and Roots

| ALSTRGMERIA, Mixed. Tall Each plant, with beautiful flowers. \$o Io | Doz. <br> $\$ 0 \varepsilon_{5}$ | $\$ 550$ |
| :---: | :---: | :---: |
| ANEMONE, Caen Mixed (Poppy- |  |  |
| flowered Anemone) . . . . o5 | 35 | 25 |
| Elue Incomparable. Azureblue ; double . . . . o5 | 40 | 250 |
| " Double Mixed . . . . . 05 | 30 | 200 |
| " Single. Light colors . 05 | 30 | 200 |
| White Ceres. Double . . . . 06 |  | 400 |
| " The Bride. Single . . . 05 | 30 | 150 |
| Double. All colors mixed . . 05 | 30 | I 50 |
| Single. All colors mixed . . 05 | 20 | I 00 |
| Appenina, Blue Star. Very charming clear blue, starshaped flowers; excellent for naturalizing ; early flowering 05 | 45 | 300 |
| Appenina, White . . . . . . . 05 | 45 | 3 о0 |
| Fulgens. Dazzling scarlet . . 06 | 50 | 350 |
| ANTHOLYZA,Mixed. Like Glad- |  |  |
| APIOS tuberosa. Hardy climber. 05 | 50 | 3 оо |
| ARUM Dracunculus . . . . . . 12 |  |  |
| Crinitum. Marble stems . . . 20 | OO |  |
| Cornutum (Red Calla) . . . 25 |  |  |
| Italicum. Hardy . . . . . . 05 | 50 |  |
| maculatum . . . . . . . . . 08 | 75 |  |
| palæstinum sanctum . . . . . 20 |  | 1200 |
| BESSERA elegans (Coral Drops) o5 | 50 | 350 |
| BRODIÆAS. Eight named varieties, assorted . . . . . . o5 Mixed, All sorts . . . . . . 05 | 40 30 | 250 150 |
| CALADIUM esculentum . . . . 25 | 250 |  |
| ALOCHORTUS. Eight named varieties, assorted . . . . . o5 | 40 |  |
| Mixed. All sorts . . . . . . o5 | 30 | 150 |
| CAMASSIA Leichtlinii. Splendid; tall; purple . . . . . 10 | 80 | 500 |
| Leichtlinii. Cream-colored . 12 |  |  |
| CINNAMON Vine Roots . . . . o5 | 50 | 350 |
| CLEMATIS coccinea . . . . . . 15 | 50 | Io |
| C00PERI Drummondii (Evening |  |  |
| Star) . . . . . . . . . . 05 | 40 |  |
| Pedunculata. White ; fragrant o5 | 40 |  |

COLOCASIA, Black Stem. A Each Doz. roo magnificent plant for single lawn specimens. More decorative than Caladium esculentum. 7 to 9 inches \$0 $30 \$ 300$ 9 to II inches . . . . . 50500
CYCLOBOTHRA flava . . . . . 0540 \$2 50

EUCHARIS Amazonica. Fine greenhouse plant . . . . . . 75
GLOXINIA, Red . . . . . . . . I2
Spotted . . . . . . . . . . . I2
White . . . . . . . . . . . . I2

Blue . . . . . . . . . . . . I2
Mixed . . . . . . . . . . . 10
H®MANTHUS albiflos. White. I 25 coccineus. Scarlet; for pots. I 50 puniceus. Orange-red; for pots I 50 tigrinus. Crimson; for pots. 2 oo
HYACINTHUS candicans . . . 05
INCARVILLEA Delavayi . . . . 25250
MADEIRA Vine Roots . . . . . Io I oo
MILLA biflora. Pure waxy white. o5 40250
NERINE crispa . . . . . . . I oo
Flexuosa. Bright crimson . I oo Fothergillii. Bright, glittering scarlet . . . . . . . . . . I 00
Japonica (Japan Spider Lily) . o8
Sarniensis (True Guernsey Lily). Brilliant crimson . . 35
Undulata. Rosy purple . . . 75

## PANCRATIUM Illyricum . . . . 50

 maritima (Sea Daffodil) . . . 15undulatum. White . . . . . I5
PENTLANDIA miniata. Beautiful crimson flowers . . . . . 20
TRITOMA Pfitzeri. Large spikes of intense flame-colored flowers. In beds it makes a gorgeous display. It should be planted in the spring 15

I $50 \quad 1200$
TRITONIA crocata. Mixed . . os
TUBEROSES, Dwarf Double . . 05
Albino. Pure white ; single . 05
Variegated Leaf
o5

| I | 25 | 800 |
| :--- | :--- | :--- |
| I | 25 | 8 |
| I | 25 | 8 |
| I | 00 |  |
| I | 25 | 800 |
| I | 00 | 7 |

3 оо

350
500
501000
I 50
900
200

# Insecticides and Remedies for Plant Diseases 

## BUG DEATH

This is a fungicide, insecticide and plant-food combined, which has been used for eight years with firstclass results. $\mathrm{I}-\mathrm{lb}$. package, $15 \mathrm{cts} . ; 3-\mathrm{lb}$. package, 35 cts.; $5-1 \mathrm{~b}$. package, 50 c .; $121 / 2-1 \mathrm{~b}$. package, $\$ 1$; 100-lb. package, $\$ 7$.
Perfection Shaker for applying above, 65 cts . each.

## COPPERDINE

A combined fungicide and insecticide, used simply by adding water in proportion of one pound of the paste to 16 gallons of water. It prevents black rot, downy mildew and anthracnose of the grape, pear leafblight, apple scab, mildew, etc. It kills codlin moths, pear insects, peach and apple borers, currant worms, cabbage worms, potato bugs and caterpillars. i-lb. box, 25 cts., makes i6gallons spray ; $5-1 \mathrm{~b}$. box, $\$ 1$, makes 80 gallons spray.

## FIR-TREE OIL

For greenhouse and house plants. It destroys all plant insects without injuring the plant. It is the best insecticide for scale, aphis, red spider, mealy bug, thrip and worms. Dilute in the proportion of 1 pint to 20 gallons of water. Apply with vaporizer or syringe. 1/2pt., 4oc.; pt., 75c.; qt., \$1.25; 1/2gal., \$2.25; gal., \$4.

## FIR-TREE OIL SOAP

This is the same as the Fir-Tree Oil, but in soap form. It is useful for the same purposes. Mix at rate of I ounce to a gallon of water, and apply with bellows or syringe. $\quad 1 / 2-1 \mathrm{~b}$. tin, 25 cts .; $2-1 \mathrm{~b}$. tin, 75 cts .

## DALMATIAN INSECT POWDER

Effective against almost all kinds of insects. Per $1 / 2-1 \mathrm{~b}$. box, 30 cts .; per $1-1 \mathrm{~b}$. box, 50 cts .

## GISHURST'S COMPOUND

A certain remedy for greenfly, scale, mealy bug, etc. Excellent for greenhouse use. Full directions for use on each box. Per I-lb. box, 50 cts.

## HAMMOND'S GRAPE DUST

For the prevention of mildew on roses, grapes, gooseberries, etc. Apply with bellows. 5-1b. package, 35 cts.; 10-lb. package, 60 cts .; 100-lb. keg, $\$ 5$.

## HELLEBORE, POWDERED

An excellent protection from currant worms, grape slugs, caterpillars, etc. May be applied dry or mixed in water-1 oz. to 3 gallons. Per 2-lb. box, 35 cts.; per $1-1 \mathrm{~b}$. box, 20 cts .; $1 / 2-\mathrm{lb}$. box, 12 cts .

## KEROSENE EMULSION

For cabbage worms, scale on trees, caterpillars, melon louse, rose bugs, greenfly and lice of all kinds, either on plants or animals. Dilute 25 to 50 parts. Gal., \$I.

## LEMON OIL

For destroying scale, caterpillar, mealy bug, red spider, greenfly, etc. Directions on can. Dilute with water 30 to 50 parts. $1 / 2$ pt., 25 cts .; pt., 40 cts ., qt., 75 cts.; gal., \$2.

## LITTLE'S ANTIPEST

A sure destroyer of all insect pests. It is non-poisonous and harmless to vegetation. Mixed with water as follows it is effectual against-greenfly, i pt. to 10 gals. of water ; mealy bug, I pt. to $11 / 2$ gals.; red spider, I pt. to 2 gals.; ants, wireworms and slugs, I pt. to 1 gal. Qt., 60 cts .; $1 / 2 \mathrm{gal}$. can, $\$ 1$; gal. can, $\$ 2$.
"NICO-FUME" TOBACCO-PAPER
For fumigating greenhouses. "Nico-Fume" is positively the strongest Tobacco-Paper on the market; does not injure blooms, and furnishes the easiest method of fumigation ever devised. "Nico-Fume" is packed in special friction-top tins and is sold as follows: $\mathbf{2 4}$ sheets, 75 c .; 144 sheets, $\$ 3.50$; 288 sheets, $\$ 6.50$.

## NICOTICIDE

For fumigating or spraying. Used effectually for greenfly, mealy bug, red spider and thrips. Does not damage the foliage or flowers of the most tender plant. Sold in cans as follows: No. I, containing I pt., sufficient for 32,000 cubic feet of space, $\$ 2.50$ each; No. 2, containing $1 / 2 \mathrm{pt}$., sufficient for 16,000 cubic feet of space, $\$ 1.25$; No. 3, containing $1 / / 1 \mathrm{~b}$., sufficient for 8,000 cubic feet of space, 70 cts .

## NICOTICIDE FUMIGATORS

Consisting of pan, wire-frame and the lamp, are very durable, and will last for years. Price, 50 cts .

Full directions for using both compound and fumigators are printed on each can.

## PARIS GREEN

Mixed at the rate of 1 lb . to 200 gallons of water, it will prove effective against all chewing insects. Per 1 llb can, 35 cts.; $1 / 2-\mathrm{lb}$. can, $20 \mathrm{cts} . ; 1 / 4-\mathrm{lb}$. can, 15 cts. This article is liable to fluctuate in price.

## SLUG SHOT (HAMMOND'S)

Excellent for destroying cabbage, turnip and beet fly, potato bugs, currant worms, etc. Prepared ready for use. $5-1 \mathrm{~b}$. package, 30 cts ; ; Io- 1 b . package, 50 cts .; 100 lbs., \$4.

## SULPHUR, POWDERED

Valuable for protecting against mildew on grapes, roses, etc. Per lb., io cts.; Io lbs., 60 cts.; ioo lbs., $\$ 4$.

## SULPHO-TOBACCO SOAP

Dissolve in proportion of 2 ounces to a gallon of water, and apply with a syringe or atomizer. It will destroy rose slugs, aphides, greenfly, bark-lice, etc. Per 3 -oz. box, 10 cts .; 8 -oz. box, 20 cts. ; $10-1 \mathrm{lb}$. box, $\$ 3$.

## TOBACCO DUST

If dusted on while the foliage is moist it destroys rose lice, cabbage and turnip fleas, etc. Spread upon the ground, it keeps off all earth insects. Per lb., 10 cts.; 5 lbs., 30 cts.; 10 lbs., 50 cts .; $100 \mathrm{lbs} ., \$ 2.50$.

## TOBACCO STEMS

For fumigating plants infested with greenfly. Per bale of about ioolbs., $\$ 1.50 ; 200 \mathrm{lbs} ., \$ 2.75 ; 400 \mathrm{lbs} ., \$ 4.50$.

## "ROSE LEAF" TOBACCO EXTRACT

A perfectly pure, highly concentrated extract of tobacco, most effective for destroying all insects and scale on plants. Pint cans, 30 cts.; qt., 50 cts.; gal., $\$ 1.25$.

## WHALE-OIL SOAP

For washing trees and destroying all insects on the bark. Excellent for San José scale. Mixed at the rate of Ilb . to 4 gallons of water, it will rid cabbage, rose bushes, peach trees, etc., of the aphides that so often infest them. Per $\mathrm{I}-\mathrm{lb}$. box, 15 cts.; 5 lbs., 50 cts .; Io lbs., 90 cts.; 100-lb. keg, \$7.

## BORDEAUX MIXTURE, or FUNGIROID

For all fungous diseases, such as mildew, and the various rots of the grape. Full directions on label. Dry, I-lb. box, 20 cts.; 4 lbs. and over at 15 cts. per 1 b .; $50-\mathrm{lb}$. keg, $\$ 6$; liquid, I quart, 40 cts.; I gallon, $\$ \mathrm{I} .25$.

## LIME, SULPHUR AND SALT MIXTURE (CALIFORNIA WASH)

This is one of the best remedies for San José scale. It has been thoroughly tested and found to be better than Whale Oil Soap, Kerosene Emulsion or Crude Oil. One gallon makes 25 by simply adding water. I quart, 40 cts .; I gallon, $\$$ r.25.

## High-Grade Registered Fertilizers

## THORBURN'S COMPLETE MANURE

Guaranteed to contain ammonia, 3 to 4 per cent; available phosphoric acid, 6 to 8 per cent; actual potash, 6 to 7 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.
In 167 -lb. bags, per ton . . . . . . . . . \$38 oo
Single bags of 167 lbs .
350
Per bag of 100 lbs . . . . . . . . . . . . . 225
50 lbs. . . . . . . . . . . . . . . . . 150
25 lbs.
I 00
ro lbs.
50

## THORBURN'S LAWN FERTILIZER

Guaranteed to contain ammonia, 6 to 7 per cent ; available phosphoric acid, all soluble, 8 to io per cent; actual potash, 5 to 6 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. In 167 -lb. bags, per ton
\$48 оо
Single bags of 167 lbs .
Per bag of 100 lbs .
3 oo
50 lbs .
I 75
25 lbs.
I 00
ı lbs.
50

## ACME POTATO MANURE

Guaranteed to contain ammonia, 4 per cent; available phosphoric acid, 6 per cent ; actual potash, io 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. In 167-lb. bags, per ton.
$\$ 40$ oo
Single bags of 167 lbs . 4 oo
Per bag of 100 lbs 3 оо
50 lbs . I 75
25 lbs .
Io lbs.
I 00

## CLAY'S CELEBRATED FERTILIZER

It is undoubtedly one of the best manures for all horticultural purposes, either in greenhouse or garden, and we believe its high reputation is well deserved. Productive and lasting, and notwithstanding its apparently high price, it is quite economical.

## PRICES IN BACS



## CANADA HARD-WOOD ASHES

We quote only the very highest grade, extra screened, unleached, analysis guaranteed. For topdressing for lawns, especially if the soil is inclined to be stiff or sour, there is nothing better. Besides the high fertilizing value, the 30 per cent of lime in these ashes sweetens the soil and keeps away insects.

Price-In barrels of 200 lbs ., $\$ 3$; per ton, $\$ 20$.

## ALBERT'S PLANT-FOOD

## The best fertilizer for house plants

This celebrated plant-food, made in Germany, is a scientific preparation containing in a highly concentrated and easily soluble form the food elements required by plants. It is odorless, clean to handle, quick in its action, and unequaled in its effects. It is put up in attractive tins with full directions for use printed on each, and containing inside a small spoon holding the exact quantity required for dissolving in a quart of water. By its application plants acquire a sturdier growth, fuller development and a mani-
 fold increase in bloom. For palms, ferns, India rubber plants, bulbs and all kinds of pot-plants, it is by far the most complete, most effective, most economical and easiest applied fertilizer made.

Price- $\mathbf{1 5}$ cts. per tin, by mail, 8 cents extra

## PULVERIZED SHEEP MANURE

A very rich, pure, natural manure. It is excellent as a top-dressing for lawns. Its effect is immediate and very lasting. There is nothing better for mixing with the soil for greenhouse plants-one part manure and six parts soil. It is recommended for use in the vegetable garden, promoting a steady and rapid growth. It makes a rich and safe liquid manure$I$ pound to 5 gallons of water.
5-lb. package . . . . . . . . . . . . . . \$o 30
ıo lbs. . . . . . . . . . . . . . . . . . . 50
50 lbs. . . . . . . . . . . . . . . . . . . 125
ioo lbs. . . . . . . . . . . . . . . . . . . 200
Ton
3000

## BONE FERTILIZERS

Pure Ground Bone Meal, No. 1. This finely pulverized ground bone is excellent for rose culture. It decomposes very rapidly, and is more quickly effective than the coarser grade. It is excellent for mixing with the soil for potting. 5 lbs., 25 cts ; 50 lbs., $\$$ i. 25 ; ioo lbs., $\$ 2$; per ton, $\$ 30$.
Ground Bone, No. 2. This is coarser than the above, and is suitable for general purposes, for topdressing for lawns, and for garden and field crops. Per ioo-lb. bag, $\$ 2.25$; per ton, $\$ 36$.
Ground Bone, No. 3. A little coarser than No. 2. Per ioo lbs., $\$ 2.50$; per ton, $\$ 38$.
Crushed or Coarse Bone, No. 4. Being much coarser, this takes effect more slowly, but is correspondingly more permanent. Ioo-lb. bag, \$2.75; per ton, $\$ 43$.

## OTHER FERTILIZERS

Blood and Bone Fertilizer Horn Shavings, Fine Grade


# Horticultural Implements and Garden Requisites 

## The numbers correspond to the illustration numbers on page 133



GLOVES, Gardener's Goatskin . per pair, $\$ \mathrm{I}$
GRAFTING WAX. In $1 / 4-, 1 / 2-$ and $\mathrm{I}-\mathrm{lb}$. packages . . . . . . . per lb., 30 cts. .
GRASS BORDER SHEARS. See Shears, page 135 .
GRASS EDGING KNIVES (English). $\$ 1.75$ to 225
GRASS H00KS, or Sickles, Best English, Eachwelded back . . . . . . . . . 35 cts. to $\$ 070$
HEDGE SHEARS. See Shears, page 135.HOES, Draw or Corn45
Grub ..... 57
Scuffle, Dutch or Push, 4 to 9 in. (Fig.
Scuffle, Dutch or Push, 4 to 9 in. (Fig. 3I) . . . . . . . . . . . . . 45 cts to ..... 70
Triangular (Fig. 32 )Warren65 cts., 70 cts . and75
HORSE BOOTS. The best make . per set, \$9HOSE NOZZLE, "Bordeaux." For $1 / 4$-inchpipe or $1 / 2$-inch hose
75
Coupling and Stock. Has $1 / 4$-inch pipe thread ..... 25
Gem Graduating, for $3 / 4$-inch hose ..... 60
HOSE MENDERS, Cooper's . per doz., 75c. . ..... 10Hose BandsIO
HOSE, RUBBER, "Cascade." "Three-ply."
$3 / 4$-inch, in any length, at 15 cts. per foot.$3 / 4$-inch, per foot, 15 c .
"Triton" ..... 18c. .
"Electric" . . . " " 20 c .
HOTBED SASH. Best quality.
Unglazed. $3 \times 6$ feet . . . per doz., \$12 . I IoGlazed. $3 \times 6$ feet . . . . . Bulb Catalogue.)
HYACINTH GLASSES. (See BulSaynor's Celebrated English. Best make.
" No. 938, Pruning (Fig. 7) . ( $\quad$. $\quad$. $\dot{\text { I }}$ ) ..... I 75 ..... 25
" No. 187, Pruning (Fig. 9) ..... 150
No. 312, Pruning (Fig. 10) ..... I 50
" No. 8o, Pruning (Fig. II) ..... 85
No. 400, Budding (Fig. 12)
No. 400, Budding (Fig. 12) ..... I 35 ..... I 35
" No. 40I, Budding (Fig. I3) ..... I 35
" No. 343, Budding, 2 blades
150
150
No. 403, Budding, Long-handled ..... I 50
Asparagus. English (saw blade) (Fig. 14) ..... I 00
Granite State ..... 50
Grass Edging (Fig. 15) ..... $\$ 1.75$ to ..... 225
LABELS, Wooden, Pot and Garden-

| 4 -inch | $\bigcirc$ Plain - |  | --Painted |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Per 100 | 1,000 | Per 100 | 1,000 |
|  | . \$0 15 | \$0 60 | \$0 15 | \$0 90 |
| $4^{1 / 2}$ | 15 | 80 | 20 | 100 |
| 5 " | 15 | 90 | 20 | I 25 |
| 6 " | 20 | $1{ }^{0}$ | 25 | 1 35 |
| 8 " | 40 | 350 | 50 | 4 oo |
| 12 | 55 | 450 | 65 | 500 |
| 24 in . (for ga | en) 250 |  |  |  |

Wooden Notched Tree-


LAWN RAKES. See Rakes, page 135.
LAWN SWEEPER, "Model No. I"
II 00
LEAF-MOULD . . . . . . per I-barrel bag, I 50
MANURE SPREADER, Kemp's. Spreads stable manure, coarse or fine, very evenly, either broadcast or in drills. Each
No. I holds 30 bushels
No. 2 " 50
 houses, sashes, etc. qt., 40 c . ; $1 / 2$-gal., 70 cts. . . per gal.,
MASTICA GLAZING MACHINE (Fig. 48)

1 25

HORTICULTURAL IMPLEMENTS AND GARDEN REQUISITES, continued

MATS, for Covering Sashes. Made of jute, Each stitched through; hemmed with canvas
 and thickly padded; size 76 ins. by 76 ins.; one mat covers two sashes (Fig. 49).
No. I. Both sides
jute
No. 2. One side
jute, the other side water-proof duck . . I 75
MOLE TRAPS-
Olmsted's Improved (Fig. 40)
I 50
The Reddick. Is easily set, with very powerful spring, and is in every respect a perfect trap (Fig. 41) 85
MOSS, Sphagnum. Per i-barrel bag . . . . I oo
Per 5-barrel bale
PEAT, Rotted. Per i-barrel bag . . . . . . I 50
Orchid. Per r-barrel bag . . . . . . . . I 50
PINCERS, for glazing-points
50
"PLANET JR." DRILLS. See page 140 .
PLANT STAKES. Round, Painted Green.
$\begin{array}{cc}\text { Per doz. } & \text { Per } 100 \\ \$ 0 ~ 35 & \$ 200\end{array}$


Southern canes, 6 to 8 ft l long. \$9 per r,ooo. I 25 Heavy, Square, Tapering, Painted Green. Per doz. Per ioo


PRUNERS-
Each
Waters' Long-handled Tree. 4 feet . . . . \$o 75 ${ }_{8} 6$ feet . . . . . . . . . . . . . . . . 80
8 " . . . . . . . . . . . . . . . . I oo
. . .............. 1 1o
Wiss' . . . . . . . . . . . . . . . . . 250
Saw, Cast Steel Socket. I8 inch . . . . . I 75
RAFFIA, for tying (Fig. 51). per lb., 2oc. ; 5 lbs., goc.; ; rolbs. \$I 50 .

## RAKES-

"Automatic Lawn."
(Fig. 43.) A back-
 ward motion of the operator will clean all Each the teeth at once. 26-teeth size, 80 cts . each; 38 -teeth size
\$I 00
The "Lawn King." Teeth veryclose. Will not tear sod as other lawn rakes do. 26teeth size, 35 cts. each ; 38-teeth size
Steel Wire, for lawns
50
Wooden, for lawns .
60
Wo 30
English or Daisy (Fig. 44) . . . . . . $\$ 3$ to 350
American Garden. Steel-handled. 40 cts. to 60
REELS, Hose, Tubular Iron (Fig. 52). Very light weight, frictionless, and the wheels so high that they are very easily worked. They never break or wear out.
No. Io, for 100 feet $3 / 4$-inch hose

## REELS, continued

EachNo. 20 , for 150 feet $3 / 4$-inch hose \$3 oo 5 oo
ROLLERS. See page 142 .
RUBBER HOSE. See Hose, page 134.

SAWS, Pruning, various sizes and kinds . . . 7octs. to \$1 25
SCISSORS, Grape. Best English for thinning the bunches . 90c., \$1.25 and
Flower Gatherer . \$1.25 and
SCYTHES, English Lawn. Cast steel, 34 to 38 inches. 150
150 $\$ 1.50, \$ 1.60$ and 175
SCYTHE SNATH or HANDLE, Patent Loop Each Heel
SCYTHE STONES, Round Dressed Talacre per doz., \$1.50 . I5
SCYTHE RIFLES, Triple Emery-coated per doz., \$I $\quad$ Io
SEED SOWER, Little Giant . . . . . \$2 and 5 oo

Cahoon

375

SHEARS-
Perfection Pruning (Fig. I). The best made. No. I. 7 inches

| No. 1. | 7 |
| :--- | :--- |
| No. 2. | inches . . . . . . . . . . . |
| No. | 00 |

No. 3. 9 " . . . . . . . . . . 3 oo
No. 4. ${ }^{10}$ " . . . . . . . . . . . 350
Watch-spring English Pruning (Fig. 2) . . I 50
Hand-pruning, Wiss' Solid Steel. Two sizes. 9 inches
10 " . . . . . . . . . . . . . . . 250
German Pruning . . . . . . . . . . . . . 75
Lopping, American. 2 feet . . . . . . . 1 oo
W ${ }^{3}$ feet . . . . . . . I 25
Waters' Long-handled Tree Pruners. See under Pruners.
Hedge, English (Fig. 3). 8- to 1 r-inch blade. Four sizes . . . . . . . $\$ 2$ to

300
Grape Scissors, Best English (Fig. 4). For thinning the bunches . 90 cts., $\$ 1.25$ and I 50
Flower Gatherer, English (Fig. 5) . \$1.25 and I 50 Champion

I 25
Grass Border, Best English (Fig. 6). 8, 9 and io inches . . . . \$2.50, \$2.75 and 3 oo
Spring Grass, English. For trimming grass. I 25
" " American. 7 inches . . . . I oo
" " " 6 inches . . . 75
SHOVELS, Ames' Best Cast Steel. Square and
diamond-pointed; long or short handles. I 50
SILKALENE . . . . . . . . . per lb., \$I .
SPADES, Ames' Best Cast Steel
SPRAYERS. See pages 137 and 138 .
SPRINKLERS-
Scollay's Rubber (Fig. 37) . . . . . . . . I 00
Tyrian Rubber . . . . . . . . . . 75
Lawn, Peck's Improved (Fig. 42). Standard 4 feet high.
4 -arm sprinkler

8 -arm sprinkler
Twin Comet. See page 137 ..... 5 oo
Fountain No. 1, Saucer-shaped Bottom. Cannot injure turf ..... 400
Water Witch No. 3 ..... 75
I 25
New Century (on wheels)
Columbia ..... I 50

HORTICULTURAL IMPLEMENTS AND GARDEN REQUISITES, continued


Hotbed and Mushroom-bed (Fig. 19), boxwood, brass tip; made for plunging. $\$$ I and 160
Japanned Tin Case (Fig. 20)
60
30
Self-Registering Japanned Case (Fig. 2i).
8 -inch size
250
$\begin{array}{lll}\text { IO } \\ \text { I2 } & \text { " } \\ \end{array}$
3 co
350
TOMATO SUPPORTS . . . . . doz., \$r.5?.
20
TORCH. For burning caterpillars. Filled with asbestos. Small

25
Large
35
TRELLIS "Multum in Parvo." Made of wood, easily adjusted, requires no stakes. For all annuals that require support, but especially
TROWELS. Solid for tomatoes. shanks, cast steel (Fig. 33). 50 cts . to 60 cts . each.
Transplanting. 25 cts. and 50 cts. each.

No. I. 15 feet. $\$ 2$ each.
No. 2. 20 feet. $\$ 2.75$ each.
No. 3. 25 feet. $\$ 3.25$ each.
TURFING IRONS, English. \$4 each.
TWINE, Green Smilax. 50c. perlb.
VEGETABLE SC00P, Wire. For handling potatoes, apples, etc. \$1.50 each.

53
WATERING POTS, French Model (Fig. 53). 8-qt., \$2.
The "Philadelphia," with brass joints and two copper-faced roses. 6-qt., $\$ \mathrm{r} .75$; 8-qt., $\$ 2$; 10-qt., $\$ 2.25$; 12-qt , \$2.50.

Each
WEEDERS, Lang's (Fig. 26) .
\$0 25
Excelsior (Fig. 27)
I5
New Hand (Fig. 28)
I5
Cleveland Lawn (Fig. 29). For extracting the roots of dock, etc. (Can be used easily and without stooping)
Lawn. For removing docks, dandelion, etc.; can also be used as an Asparagus Knife.
WHEELBARROWS (Fig. 5t). For garden use. Two sizes. Medium

375

$$
\text { Large . . . . . . . . . . . . . . } 425
$$

FLOWER POTS, TUBS, VASES, SAUCERS,ETC. -


70 Flower Pots. The best make. Of sizes I inch to 3 inches we do not sell less than 100 of a size, and of larger sizes not less


71 than a dozen. We pack carefully and in the most approved manner, but will not be responsible for breakage in transit (Figs. 70 and 71).


OWER POTS
Price Price Price per doz. per 100 per 1,000 $\$ 060 \$ 450$
$\begin{array}{ll}65 \quad 4 & 75\end{array}$
550
625
750
975
3 00
5 oo
100
2800
4000

Flower Vases displaying cut flowers. Made of indurated wood-fiber. Each 8 inches in diam., is inches deep. \$o 60


55

| $51 / 2$ | $"$ | $"$ | " | 10 | $"$ | $"$ | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $41 / 2$ | $"$ | $"$ | " | 90 |  |  |  |
| 4 | $"$ | $"$ | $"$ | 6 | $"$ | $"$ | . |
| 45 |  |  |  |  |  |  |  |



56


57

Flower-pot Saucers, Indurated Wood-fiber (Fig. 56). Very light and durable. Not porous, and will protect tables on which plants stand.


Flower-pot Rolling Stands (Fig. 57), for heavy plants. Platforms are of indurated fiber ware;
 will not soak or rust. Casters have ball-bearings. Each 12 inches, 3 casters \$0 80

| 14 | ' | 4 | ' |  |  | . |  |  |  |  | 90 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| r6 | ' | 4 | ' |  |  | . | . |  |  |  | OO |
| 18 | ' | 4 | ' |  |  | . |  |  |  | 1 |  |
| 20 | ' | 4 | ' |  |  |  |  |  |  |  |  |
| 22 | ، | 5 | ' |  |  |  |  |  |  | I |  |

Flower Tubs, Columbia (Fig. 58). Made of cypress timber. Natural varnish finish.


American Tree Tubs. Made of cypress, natural finish, with black hoops and feet.


## HORTICULTURAL IMPLEMENTS AND GARDEN REQUISITES, continued

Flower or Tree Tubs, Cedar (Fig. 59). These are made of Virginia white cedar, painted green, with hoops, handles and leg castings painted black. The bottoms are perforated and are removable.

columbia tub style (See preceding page)

Outside Diameter
No. 0, 27 inches.
No. 1. 25
No. 2, 23
No. 3, 21
No. 4, 18
No.
No. 5, 16
No. 6, 14
No. 7, 13
No. 8, 12
N
Length of Staves
$\left.\begin{array}{llllllll}24 & \text { inches } & \text {. } & . & . & . & . & .\end{array}\right) . . . \mid \$ 550$

SYRINGES, ETC.


CEDAR TUB STYLE

Ladies' Syringe, with One Spray Rose. Length of barrel, $121 / 2$ inches ; diameter, I 5 - 16 inches. No. I, $\$ 3$.
Ladies' Syringe, with Jet and Two Spray Roses; the two roses, when not in use, are screwed on the side of the barrel. Length of barrel, $141 / 2$ inches; diameter, I $5-16$ inches. No. 2, $\$ 4.50$.

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. (See cut No. 35, page 133.) No. 3, $\$ 6.50$.

Best Conical Valve Syringe, large size, with One Stream and Two Spray Roses, which are placed, when not in use, in the handle of the syringe. The handle is strongly mounted with a solid brass cap and ring. Length of barrel, 18 inches; diameter, $11 / 2$ inches. No. 4, $\$ 7$.

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. (See cut No. 36, page 133.) No. 6, $\$ 8$.

Scollay's Rubber Sprinkler. For florists' use and window-gardening. \$I.
Scollay's Angle-neck Rubber Sprinkler. For spraying under leaves. \$r.
Tyrian Rubber Sprinkler. 75 cts.
Woodason's Atomizer. For the application of all liquid insecticides. $\$ 1.25$ and $\$ 2$.
Cyclone Sprayer. (See cut No. 38, page 133.) 75 cts.
Underleaf Sprayer. Reaches under the foliage. 75 cts .
Fountain No. 1 Sprinkler. Saucer-bottom; does not injure the turf; is moved from place to place by a rope. An excellent sprinkler that is highly recommended. $\$ 4$.

## "TWIN COMET" LAWN SPRINKLER


"FRUITALL"'SPRAY PUMP

The globe, or body, of the sprinkler is made in two parts, and, by means of the swiftly revolving arms and intermediate gears, the upper half is made to revolve slowly, carrying the hose nozzle from which a full stream of water is thrown far out beyond the sprinkle of the arms. With an ordinary pressure of water, 20 pounds or upwards, it will thoroughly sprinkle an area of 80 feet in diameter. With the exception of the legs all parts are solid brass, heavily nickled. Will sprinkle four times greater area than any other sprinkler. Price, $\$ 5$.

## "FRUITALL" SPRAY PUMP

All working parts of brass, including plunger, gland, valve, valve seats and strainer. The air-chamber is of steel. The only spray pump which can be mounted on or removed from barrel or tank by the simple adjustment of two thumb screws. It is held firmly by clamp at top, and is adjustable to large or small barrel. To mount the "Fruitall" Spray Pump, saw a rectangular hole $4^{1 / 2}$ inches by $61 / 2$ inches in head of barrel next to stave. Put the pump down through this hole in the barrel, having adjustable clamp hook over the stave with thumb screws on the outside. Price, Outfit $A$ Pump with one lead ro ft ., $1 / 2 \mathrm{in}$. discharge hose, with "Seneca" (or Vermorel) Spray Nozzle, $\$ 9.50$. An 8 -foot Iron Extension Pipe for tree-spraying fitted to attach can be supplied for $\$ 1.50$ extra.

## MYERS' BUCKET BRASS SPRAY PUMP

Being made of brass, it is not affected by the arsenites used for spraying. Easily operated; throws a solid stream 50 feet. It is provided with a combination nozzle, and also with a sprinkler for flowers. For spraying large trees, an 8 -foot pipe extension is supplied for 60 cents extra. This pump is also valuable for washing windows. Price, $\$ 4$.

## BLIZZARD HIGH PRESSURE SPRAYER

An air-force sprayer for potatoes, fruit trees, etc. It is first charged with air and then it does the spraying with very little work. Galvanized iron tank. Price, \$2.

## THE "SUCCESS" KNAPSACK SPRAYER

A knapsack and bucket sprayer combined. 5-gallon copper tank. Brass pump with bronze ball valves. For spraying plants with Bordeaux mixture or other fungicides. To be used as a bucket Sprayer, the handle and lever are removed, and the extra handle with which the outfit is provided is placed in position, as shown by the dotted lines. It is provided with a mechanical

MYERS' BUCKET SPRAY PUMP
agitator. We also furnish a special attachment for under-spraying. Price, complete, as shown in cut, \$12.

"SUCCESS", KNAPSACK SPRAYER

## LEGGETT'S CHAMPION POWDER GUN

For distributing dry insecticides and fungicides, such as Paris green, hellebore, sulphur, tobacco dust, fungiroid. Without the tubes it is 27 inches long, but when the four tubes are attached it is io feet long. An invaluable machine for use in orchard, garden or field. The regular outfit consists of six nozzles, two straps, oil-can and four tubes. Price, complete, $\$ 7.50$.

## LEGGETT'S BROWNIE POWDER GUN

Built on the same plan as the Champion, smaller, and with only one nozzle. Price, $\$ 3.50$.

## WOODASON'S DOUBLE-CONE POWDER BELLOWS

An excellent Bellows for applying powder insecticides in greenhouse, garden or field. The powder can easily be evenly distributed in any direction, under or over the foliage, without waste. (See page 133, No. 22.) Price, $\$ 3$.

## WOODASON'S SINGLE-CONE POWDER BELLOWS

The style of these is shown by our cuts, Nos. 23 and 24, page 133. They come in two sizes, the smaller one being most suitable for use in the conservatory. Price, large size, $\$ 2$; small size, \$1.

## WOODASON'S ATOMIZER

An excellent article for applying strong liquid insecticides, as it throws it out in a spray as fine as mist, and distributes it lightly, evenly, and without any waste. The small size is recommended for use in the house. (See page 133, No. 25.) Price, large size, $\$ 2$; small size, \$1. 25.

## PERFECTION POWDER DUSTER

Excellent for dusting Bug Death, Slug Shot, Land Plaster or other insecticide powders. Price, 65 cts.

## JUMBO POWDER GUN

Suitable for persons having only a few plants to treat. It is 4 inches in diameter and holds 4 ounces of powder and serves its purpose admirably. Price, 25 cts.


WATER BARREL TRUCK

## "AUTO-SPRAY" PUMP

A self-operating sprayer of simple construction, "auto-spriay" plimp durable, easy to carry and to work. Made of galvanized iron and solid brass, with four-ply rubber hose. For spraying trees, shrubs, cleaning windows, etc. A perfect pump. Price, with brass tank, $\$ 6$; galvanized iron tank, $\$ 4.50$. Brass extension pipe 30 cts. extra. Fitted with "Auto-Pop" nozzle, \$i extra.

## WATER BARREL TRUCK

## (COMBINED SPRINKLER, LEAF-RACK

 AND HAND-CART)The barrel is easily disconnected from the truck either while full or empty. The following extra attachments can be furnished if required: (I) Box with trunnions and spring catch, forming a dumping hand-cart.


USED AS LEAF-RACK


USED AS HAND-CART




Stevens hand-fertilizer sower per is 34 inches long and holds one and one-half bushels. Price, \$12.

## RUBBER HOSE

We offer the following standard high-grade brands:
Per foot
Wallabout. 3-ply, $3 / 4$ inch . . . . . . . . . . . . . . . . . . . $\$ 0$ I5
Cascade. 3-ply, 3/4 inch 15
Triton. $3 / 4$ inch 20 price of truck and barrel. sand by removing two blades. The hop-

Electric. $3 / 4$ inch

If truck and trunnions are wanted without barrel, deduct $\$ 2.25$ from

## STEVENS HAND-FERTILIZER SOWER

Sows all kinds of lawn dressing and other commercial fertilizers, wood ashes, lime, etc., in large or very small quantities. Also excellent for sifting wood or coal ashes, sawdust or dry sand on icy walks; will also sow damp


## CLARK'S DOUBLE-ACTION CUTAWAY HARROW

This Harrow will cut and reduce the toughest sod to plant-food without the aid of a plow. It will cut from 28 to 30 acres, or will double-cut 15 acres in a day. Drawn by two horses, it will move 18,000 tons of earth 1 foot in a day. It can be set so as to move the earth but little or at so great an angle as to move all the earth i foot. It keeps the surface true and the machine runs true in line of draft. It is by the intensive cultivation effected by this Harrow that Mr. Geo. W. Clark has raised the large hay crops that have made him known as the "Grass King." Price, $\$ 30$, net.

## CUTAWAY GRADING OR SMOOTHING AND LEVELING HARROW

With this tool every field can be made as smooth as a floor and the soil pulverized fine enough for a flower-bed-makes a
 most perfect onion bed. Will smooth an acre as true as a mill-

CLARK'S DOUBLE-ACTION CUTAWAY HARROW


CUTAWAY GRADING OR SMOUTHING AND LEVRLING HARROW
pond in twenty minutes. This Harrow is also a great roadmaker. One man, with team, can make a perfect trotting track of any road. It is adjustable with a lever, by which the entire action is controlled by the driver, and he can remove at will all the earth possible for the team to haul, taking it from hills or uneven places and putting it into hollows to level up the field. For one horse, 6 feet wide, $\$$ I2. For two horses, 8 feet wide, \$14.

## THE GARDEN KING CULTIVATOR

## (SIX TOOLS IN ONE)

The Garden King Cultivator is the only garden tool made with attachments on each side of a frame, so that any kind of work can be done by reversing or turning the tool over. All steel except handles. It may be used as a Hand-hoe, Culti-
vator, Hand-plow, Seed-coverer and Double-shovel, and it is also furnished with a weeder attachment that will cultivate and keep the soil in perfect condition. Price complete, $\$ 5$.


THE GEM LAWN CLEANER

## THE GEMLAWN CLEANER

A revolving fan with metal teeth creates an air current which carries into the canvas baskets all leaves, dead grass, stones, etc., that the rake encounters. It straightens up crab grase and other running weeds so that they may be cut by the lawn mower. It combines strength and durability with light construction. Price, $\$ 14$.

## THE APOLLO LAWN SWEEPER

The machine consists of a revolving brush which throws the sweepings forward into the large grass box, which, when full, is dumped by merely pulling a cord. It removes all cut grass, leaves, twigs, and by setting it low it is excellent for taking out crab grass. It is also valuable for sweeping walks, stables, etc. Price, 20 -inch sweep $\$ 10,28$-inch $\$ 12$.



THE APOLLO LAWN SWEEPER

## LAWN SWEEPER, "MODEL NO. 1"

Designed for use on ordinary lawns, small parks, tennis courts, etc. It is 25 inches wide over all, weighs 28 pounds, and carries a 21 -inch brush. The brush is fan-shaped, and revolves very rapidly in the same direction as the drive wheels, throwing the litter backward from the under surface. Immediately behind the brush, and parallel with it, a thin shoe passes along over the ground, with its upper surface inclined. If sticks or stones are encountered, the shoe does not allow them to pass under it, but provides a passage over it into the hopper. Price, \$1I.

## "Planet Jr." Farm and Garden Tools

Space will not permit our showing and describing all of the "Planet Jr." tools, but we will send a fully illustrated catalogue free for the asking to any who desire it, and we can supply promptly anything ordered. "Planet Jr." goods are standard machines, the best on the market.
"PLANET JR." No. 4. Combined Hill and Drill Seeder and Wheel-hoe, Cultivator and Plow. Is the biggest little implement you ever saw. Just listen. It sows all kinds of garden seeds in hills or drills; hoes, cultivates, plows, throws earth to or from the rows and is a weed-exterminator of the highest order. It is the best implement in the world for the market-gardener. The hopper is big enough to hold two quarts of seed and it drops in hills $4,6,8,12$ or 24 inches apart. It covers seed the right depth and rolls down the soil. The flow is instantly stopped by automatic device. It's so easy and perfect-working that its handling amounts to recreation in gardening. It is but one of 52 Planet Jr. tools, all equally valuable. The price of this one with all attachments is $\$ 10.50$; as a drill only, $\$ 8.50$.
"PLANET JR." No. II. Double Wheel-hoe, Cultivator, Rake and Plow. It has II-inch wheels, which can be set at four

"PLANET JR." NO. 4 different distances apart. The handles are adjustable at any height, and, being attached to the arch, are undisturbed in making changes of adjustment in frame, wheels or tools. Seven pairs of tools go with the complete wheel-hoe. All the blades are of tempered and polished steel. Price, \$9.

"PLANET JR." No. 12. Double Wheel-hoe, Cultivator and Plow. Identical with No. II Wheel-hoe, except that it has fewer attachments. and is sold at a correspondingly less price. Price, $\$ 7$. "PLANET JR." No. 16. Single Wheel-hoe, Cultivator, Rake and Plow. This latest and best single wheel-hoe has a very full set of tools, such as have been found to work in the very best manner. It has
 II-inch wheel, with broad face ; is light, strong and easy run-
$\qquad$
" planet Jr." no. 16

## COLDWELL'S GASOLENE LAWN MOWER

This machine is the result of several years' experiment with Gasolene Lawn Mowers, and is undoubtedly the greatest acquisition to the cultivating of lawns of any machine ever produced. One of these machines will take the place of two or three Horse Lawn Mowers of equal size, doing the work much better, and leaving the lawn in much better condition.

The machine is built in two sizes- 35 -inch and 40 -inch. The 35 -inch weighs about $\mathrm{I}, 200 \mathrm{lbs}$., and consumes from 5 to ro gals. of gasolene per day. The 40 -inch weighs about I,600 lbs., and consumes from 8 to 12 gals. per day. The weight of this machine makes it very efficient as a lawn roller, and when so used the lawn mower can be lifted up free from the ground, and thereby adding so much extra weight to its efficiency as a lawn roller. Great as is the saving of time, labor and expense effected by this new machine, its chief advantage is that it prevents the injury to the lawn caused by horse hoofs. In this respect it is peculiarly valuable for golf links, as it will mow the Putting Greens as well as the fair green, cutting as closely as desired and more evenly than is possible with any hand machine now in use, at the same time rolling the course as effectively as any roller.
NET CASH PRICE, f. o. b. New York 35-inch cut . . . . . . . . $\$ 600$ oo 40-inch cut 750 oo


COLDWELL'S GASOLENE LAWN MOWER

BALL BEARING<br>SELF-ADJUSTING

EASIEST WORKING
FINEST FINISHED
LONGEST LASTING


The Thorburn Century Ball-Bearing, made expressly for us, is in every respect THE BEST LAWN MOWER ever made.

THORBURN'S CENTURY BALL-BEARING LAWN MOWER is a marvel of simplicity, as one screw adjusts both bearings. It has a simple self-adjusting device, which keeps the bearing properly adjusted for a long time without any attention ; it has our double interrhangeable ratchet; bearings wide apart; terrace-cutting arrangement, and we guarantee it to do a greater variety of work, and do it easier, than any ball-bearing mower now on the market. Our Patent Noiseless Grass Catcher can be applied to it.


GRASS CATCHER BOXES


## HORSE BOOTS

Made of very strong, heavy leather, closely riveted. The best make. Price per set of four, $\$ 9$.


This mower is made to meet the demand for a machine that will more perfectly cut borders, verges, etc., and yet retain all the other features necessary in a mower for general work. The great advantage of this mower is the substitution of a bicycle chain for the gears generally used in this style of mower. This reduces the friction to a minimum. The machine with
6 blades is highly recommended by most of the leading golf clubs in America for work on putting-greens.


## Coldwell Improved Horse Lawn Mower

This well-known standard Mower has sidedraft attachment, to enable the horse to walk on the cut grass only, and caster-rollers, which will not mark the lawn. Evenness of cut is assured by an adjustment which raises or lowers the two sides at the same time by means of a simple lever movement ; the same lever serves the purpose of raising the knives from the ground when driving over gravel walks or roads.

## NET PRICES, free on board New York

 $25-\mathrm{in}$. cut, no shafts, $\$ 38$. $30-\mathrm{in}$. cut, complete, $\$ 65$.$35-\mathrm{in}$. cut, complete, $\$ 78$.


## Cast-Iron Hand

|  |  |
| :--- | :--- |
| No. | 1. |
| No. | 2. |
| No. | 3. |
| No. | 4. |
| No. 6. |  |
| No. 8. |  |
| No. 10. |  |
| No. 12. |  |
| No. 14. |  |
| No. 15. |  |
| No. 16. |  |



| Diameter |  | Length-sections |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I5 | inches; | I5 | inches | in | 2; |
| 15 | ${ }_{6} 6$ | 22 | ${ }_{6} 6$ | 6 | 3; |
| 20 | 6 | 16 | 66 | 6 | 2; |
| 20 | '6 | 20 | " | 6 | 2; |
| 20 | 6 | 24 | " | 6 | 3; |
| 20 | 6 | 30 | ${ }_{6}$ | 6 | 3; |
| 24 | ${ }^{6}$ | 24 | 6 | 6 | 2 ; |
| 24 | 6 | 30 | 66 | '6 | 3; |
| 28 | ${ }_{6}$ | 24 | ${ }_{6}$ | ' | 3 ; |
| 28 | 6 | 30 | 66 | '6 | 3 ; |
| 28 | 6 | 32 | * | 6 | 4 ; |



## Cast-Iron Horse Land Rollers

(With either Pole, for two horses, or Shafts, for one horse. In ordering, state which you want)

|  | Diameter | Length-sections | Weight | Ne |
| :---: | :---: | :---: | :---: | :---: |
| No. 60. | 20 inch | 4 feet in 4; | 950 lbs. | - \$46 oo |
| No. 61. | 20 | 5 " " ${ }^{\text {" }}$; | 1,150 1bs. | - 54 oo |
| No. 62. | 24 | 4 ; | $\mathrm{I}, 200 \mathrm{lbs}$. | 5700 |
| No. 63. | 24 | 5 ; | I,450 lbs. | 66 oo |
| No. 64. | 24 | 6 "، "6; | 1,700 lbs. | 76 оo |
| No. 68. | 32 | 4 " " 4; | 2,200 lbs. | 10200 |

With Whiffletrees and Neck Yoke . . $\$ 3$ oo extra



Roots of Soy Beans, showing the nodules which collect the free nitrogen from the air and deposit it in the soil, thus making barren land productive, and after the first crop is harvested the ground is left richer and better for the next year's crop.

## Immense Crops Without Fertilizers

A new way has recently been discovered to make worn-out or poor land productive without fertilizers. Plants need nitrogen-can't grow without it. Air is four-fifths free nitrogen. Plants cannot extract nitrogen from the air, but there are germs that can. These germs, when put into the soil, fasten themselves to the roots of the plants, draw the free nitrogen out of the air, and feed it to the plants. You can grow Alfalfa and other crops where they never would grow before.

The germs come ready for use, in a form called Nitro-Culture, put up in small dry packages you can put in your vest pocket. Simply add it to water, and sprinkle over the seeds before planting. They also enrich the soil by storing nitrogen in it, so that the second year's crop, whatever it may be, is increased from two to ten times.

Nitro-Culture, sufficient to inoculate the following seeds per acre, mailed to any address in the United States or Canada at the following prices :



## INDEX







J. M.THORBURN \& CO.

36 CORTLANDT ST.
NEW YORK.


[^0]:    Culture.- The following are for growing in hotbeds, 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 must not be too light. Plunge the pots in a frame near the glass, where there is a little bottom heat, and keep them covered with a sheet of brown paper until the seeds germinate. Afterwards uncover and ventilate, to insure 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.

    Packets contain from 5 to 15 seeds each, according to sort.

    686 Prescott Wonder. Long dark green fruit. Per pkt. $\$ 025$
    687 Duke of Edinburgh. Very large and long; dull green; quite smooth

    25
    688 Giant of Arnstadt. Good bearer . . . . 25
    689 Sutton's Progress. Rich, dark green . . . 25
    690 Noa's Forcing. Very productive . . $\$ 025$
    691 Goliath. Very prolific 25
    692 Telegraph. Free-bearing ; handsome . . 25
    693 Lockie's Perfection. Fine color . . . . . 25
    694 Tender and True. Fine form ; good color. 25

[^1]:    Messrs. J. M. Thorburn \& Co., New York.
    Cape Town, South Africa, July 5, 1904
    Dear Sirs: Please send two ounces of same Cabbage seed I ordered from you last year (Surehead). The cabbages proved to be a splendid strain and are admired by every one who visits my garden as the best they have ever seen. Your seeds have given me very great satisfaction. Yours fainhilly,

    Signed) P. A. Hofmeyr.

[^2]:    2440 maritimum (Sweet Alyssum) (hA). Fragrant white flowers all summer . per oz., 3oc. . pkt. 5
    2441 " compactum, Dwarf. Grows erect; 6 in. . . . . . . . . . " 4วc. . . 5

    24
    2444
    2445
    2446
    2448
    " Thorburn's Bouquet. Very dwarf and compact; best for pots and borders; 3 in. Io
    " Little Gem. Pretty trailer; fine for edgings ; very floriferous . . per oz., 40c. . 5
    " procumt is, White Carpet. Of trailing habit ; flowers profusely . ". 50c. . Io
    saxatile compactum (Gold Dust) (hP). Single plants easily cover a square foot in a year, and produce many hundreds of bright yellow flower-heads. Grayish foliage. Ift. . oz., 6oc. . 5

[^3]:    2520
    252 I
    2522
    2523
    2524
    2526
    2530
    2536
    2538

    ```
    officinalis (Pot Marigold). Rich orange . . . . . . . . . . . . . . . per oz., 2oc. . pkt., 5
    " grandiflora. Very large-flowered; new strain . . . . . . . . . . per oz., 3oc. . 5
    " " sulphurea. Light yellow, large-flowered, extra choice . " 30с. . 5
    " Nankeen. A rich, soft shade . . . . . . . . . . . . . . . . . . " 25c. . 5
    " Meteor. Creamy center, edged with orange; especially attractive . " 25c. . 5
    " Prince of Orange. Glittering orange and yellow ; very vivid-flowered. " " 25c. . 5
    " ranunculoides (Garden Marigold). Handsome double flowers . . " 3oc. . 5
    pluvialis ( Cape Marigold). White or ivory . . . . . . . . . . . . . . . . " 25c. . 
    Pongei fl. pl. Handsome double white flowers . . . . . . . . . . . . . . " 40c. . 5
    ```

[^4]:    2846 Empress, Dwarf Crimson. Combs immense and vivid; foliage dark ; 9 in.
    pkt., 10
    2847 President Thiers. Very dwarf; combs bright red
    Io

