## Historic, archived document

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




AMERICAN DRUMHEAD SAVOY CABBAGE.


THORBURN'S

# Annufl eatalogue 

of

## James M.Thorbury \& Co.'s *SEEDS*



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

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

WRRTE Orders upon a blank sheet, separate from letter. Orders from new customers should be accompanied by a Post Office Money Order, if convenient, or bank-bills, if the amount enclosed is not large. Address always, J. M. Thorburn \& Co., I5 John Street, New York.

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

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

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

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

SHIPMENTS by Express, "C. O. D."-Unless otherwise instructed, we shall send all such goods as go per express, C. O. D. Orders from unknown customers, nut desiving this mode of carriage, should be accompanied by the cash.

WAIRRANTIES.-Seeds of the best possible quality will fail through improper treatmert. Thus, if a small seed be sown so deep that the young plant cannot reach the surface, the seed, however good, will fail. More failures result from a want of proper knowledge of the conditiors necessary to germination than from bad quality of the seeds themselves. These conditions are: A proper temperature, sufficient moisture, and free access of air; besides these, the soil must be in proper condition, and present no mechanical 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 form a hard crust, it will be impossible, even if all other conditions are favcrable, for the seedling plants to force their way through it, and many perish from this cause alone. Seeds differ greatly as to the temperature required for germination; Beets Cress, Peas, etc., germinate readily at a temperature of $45^{\circ}$; but it 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 little moisture. The proper amount is that which a well drained soil will naturally hold. Free access of air is all important, and this is interfered with by an excess of water in the soil. In germination complex chemical charges 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 ahove, and is able to sustain itself. Besides these conditions affecting the germination of the seed. the young plants, after they have made their way to the surface, are liable to various accidents; a sudden current of very cold air, or a continued drying wind, may cherk their growth, or destroy the young plants altogether; besides these, there are numerous insects, both below and above ground, that may attack the plants, some of these being so small that they often destroy a crop before they are discovered.

For the above reasons, we wish to state in this explicit form, that while we exercise great care to have all seeds pure and reliable, we sell no seeds with warranty, express or implied, in any respect, and will not be in any way responsible for the crop. If the purchaser does not accept the seeds on these terms, they must be returned at once.

In February we publish a list of Gladiolus and Spring Bulbs, and in September a catalogue of Dutch Bulbous Roots.

## DIRECTIONS FOR THE CULTIVATION OF VEGETABLES.

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

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

Mark the garden off into squares or beds of convenient size, to facilitate the practice of a rotation of crops, which is an important matter. As a rule, never let the same crop or kind of vegetable occupy the same bed or spot two years in succession. Potatoes and a few other things may form an exception to this rule, but it is nevertheless better to keep up the rotation. Every year these beds must be warmed up by a liberal coat of manure, which should be thoroughly mixed with the soil. Grow everything in drills or straight lines, not even excepting Corn and Potatoes. Larger crops from a given surface are grown in this way, and cultivation becomes simple and comparatively easy. The space between the drills, and other special information, is given in the body of the catalogue ; the least distance is named, in order to economize space-it might be increased in some cases with advantage.

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

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

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

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

## DIRECTIONS FOR MAKING A HOT=BED.

In the vicinity of New York, from the first to the middle of March is quite early enough to make a hot-bed, and even a little later will do well enough. The time must vary according to the latitude. Provide a quantity of fresh horse manure from the stable, and add to this, if they can be had, one-third to one-half its bulk of leaves. Mix them thoroughly, tramping down the mass in successive layers, and form into a large pile, so that fermentation will proceed even in severe cold weather. In two or three days fermentation will be apparent by the escape of steam from the heap. Now turn again, and allow the heap to remain two or three days longer, or until the second fermentation commences. Make an excavation or pit two and a half feet deep, and of a size suited to the number of plants required. The pit will be better if built up of brick. It should be made in some dry, sheltered spot, facing the south or east, if possible. Hot-bed sashes are usually $\epsilon_{3}$ feet, and one sash will generally give early plants enough for a large family. The frame for sashes should be eighteen inches high at the back, and twelve inches in front, which will give the proper slope to catch the sunlight. Cross-pieces should be placed for the sashes to slide on, to facilitate opening and shutting the frames. When everything is ready, the manure is placed in the pit and trodden down firmly in layers to the require 11 depth, two to two-and-a-half feet. Then put on the sashes, and keep the pit close 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 sjx to eight inches. The heat may be readily ascertained by plunging a thermometer in the man/are. The soil should be of wellrotted sod (or common garden soil uill do, ) mixed with about a third of fine, old manure, and in this the seeds may be sown thinly in atills two or three inchep apart, and afterwards (as soon as out of the seed leaf) either thinned out os else transplanted tif another frame. Air must be given every mild day by raising the sashes at the back. Water with tepid water whenever necessary, and during cold nights and snow-storms keep «vered with straw mats or board shutters. Tomatoes, Peppers, and Egg Plants should be sown in a separate frame from the Cabbage, Cauliflower and Lettuce, as they require more heat than the latti-. The same directions may apply to hotbeds made on the surface of the ground, except that the thane should be at least a foot wider on all sides than the frame.

## Nelv and Selected Strains in Vegetables.

## BEAN, RED WHNDSOR.

Entirely distinct from all other varieties in color of the seed, which is dark red and very


THORBURN'S EXTRA EARLY FLAT, "PRIDE OF NEWTOWN." large; in habit of growth and productiveness it corresponds with the old Windsor bean. Per packet of $1 / 4 \mathrm{lb}$., 25 cents.

## BEAN, THORRURN'S EXTRRA EARLY FI,AT, "PRIDE OF NEW. TOWN.,"

We again call attention to this new bush bean-it is undoubtedly the earliest and most prolific bean in cultivation. Of robust growth, with very long, light green, flat pods. The plants are of very bushy growth and should have plenty of space in the rows; sown thinly, they will produce forty to fifty pods on a plant; the pods are very long, light green, and flat. Per packet of about one hundred beans, 25 cents.

## BEAN, VOLGER'S KIDNEY.

A dwarf white kidney bean, and the only white bush bean that is absolutely without strings. Will prove very valuable. Per packet of two oz., 25 cents.

## BEAN, "RUBY OF EREURT."

A new and extremely valuable pole bean. The pods are of a bright rosy hue, and from eight to ten inches long. Entirely distinct from any existing varieties, and of very prolific and long bearing habit; seeds of a $\tan$ color. Per packet of two oz., 25 cents.

## BEAN, KUMERYE'S DWARF HIMA.

A novelty of great merit. Originated near Newark, New Jersey. Grows two feet high, branching out in all directions; is very productive, and especially desirable in small gardens, as it does not require any poles. Plant in rows two feet apart and one foot in the row; one plant only should be allowed to grow in a hill. Per packet of twenty-five seeds, 25 cents.

## CABRAGE, THOREURN'S IMPROVED STONE-HEAD MEAVY RED DUTCH.

A market gardener's strain of unusual size, color and weight. The result of careful and intelligent selection, it must prove to be very valuable. Its handsome appearance, which is accurately shown in our colored plate, will also commend it. Per packet, 25 cents.

## CABEAGE, THOREURN'S "MIAREET GARDENERR'S PREVATE STOCK" LARGE LATE FLAT DU'TCH.

We again call attention to this as a particularly fine strain of the immense-sized winter cabbages raised on Long Island. Not one failed to head the past season. Per oz., 50 cts.; per lb., $\$ 5$.

## CAULIFLOWER, 'THOREERE'S GILT-EDGE,

The Very Best and Surest of All.
An experience of four years with this strain enables us to state positively that it is the very best Cauliflower in cultivation, without any exceplion. It is a sure header, either for early or late sowing, and it can be left in the field longer without decaying than any other sort. It matures immediately after Thorburn's Snowball, but is a much heavier sort. Per packet, 25 cts.; per oz., $\$ 3.50$; per $1 / 4 \mathrm{lb}$., $\$ 12.50$; per lb., \$50.
L. ETTUCE, THOREIURN'S MIARKET GARDENER'S PRIVATE STOCK.
A selected strain of Butter Lettuce, introduced by us last season. It has very large solid heads, resisting the sun for a long time before running to seed. Suitable for starting under glass and transplanting in early spring, or sowing in open ground for a summer crop. Per oz., 30 cents ; per lb., $\$ 3$.

## MELON, MUSK, THE OSAGE.

A variety introduced last season from Chicago. Very distinct, both in its outside appearance and in its rich salmon-colored flesh, which is of the best quality. Per packet, io cents; per oz., 60 cents.

## ONION, MA MMOTM RED GARGANUS or "RUBY KING."

An Italian variety of the largest size; very handsome, mild and of good quality. Per oz., 25 cents ; per 1 b ., $\$ 2.50$.

## ONION, MAMMOTH RED POMPEII Or "COPPER KING."

A new Italian Onion of very large size ; skin very thin and of a handsome reddish-brown color; flesh pure white, fine-grained and remarkably mild. The race of Italian Onions of extremely large size and mild, excellent flavor is attracting much attention among our American growers, and these two sorts are especially good representatives of the class. Per oz., 25 cts.; per lb., $\$ 2.50$.


THORBURN'S MARKET GARDENER'S PRIVATE STUCK LETTUCE.

## PUMPKIN, JAPAN CROOK-NECK.

A native of Japan, and entirely distinct in shape and appearance from all other varieties.
 The flesh is rich salmon color, finely grained, and of splendid flavor. The seeds are peculiarly marked, and are easily distinguished from any other variety. As with many other Japan introductions, this is likely to prove a valuable acquisition, being so very distinct. Per oz., I5 cents; per lb., \$1.25.

## WATER MEION, THE SEMINOLE.

This is a new melon. It is quite early, very large, enormously productive and of most delicious flavor; oblong in shape, smooth and well proportioned. It is of two colors-gray and light-green, tine gray color greatly predominating. Per oz., 40 cents ; per î., \$4.


RURAL NEW-YORKER NO. 2 POTATO.

## TIME NEW AMEERYCAN SEETHTNG POTATO, 6GRURAT, NENV YOIRKKER NO. 2."9

This potato, now first offered, is the nearest to perfection of any potato yet introduced, exceeding all other first-class sorts in yield. It originated several years ago on the experimental grounds of The Rural New-Yorker, where more than five hundred varieties have been tested practically during the past twelve years. It has been tried there and elsewhere for several years with much care, and critically watched by its experienced originator for the development of weak points, any of which would have caused it to be promptly discarded. So far, it may well lay claim to being very nearly a perfect potato.

The "Rural New-Yorker No. 2" is a potato of most distinct appearance, and could readily be distinguished among a hundred others. It is very large and unusually smooth, with few and shallow eyes ; in form it is oblong, inclining to round, and rather flattened; the skin is white, as is the flesh, which is of superior quality. In maturity the variety is intermediate, and its solidity and vigor are such that it has rotted less in very wet seasons than any of the numerous sorts grown with it. The vines are heavy and strong, and the yield of handsome tubers of great uniformity of size is unusually large-less than ten per cent. of the potatoes dug have been of unmarketable size. Among the several valuable features claimed for this new potato are :

First. Distinct appearance-any one who has noticed its peculiar beauty will never fail to recognize it among a thousand. The young sprouts are purple-tipped, which adds to its unique and distinct features.

Second. Large size, and unusual smoothness of skin.
Third. Eyes few, distinct and shallow, so much so that ordinary paring leaves no depression to be afterwards cleaned.

Fourth. Its form is that which is the most approved by all potato lovers.
Fifth. Extreme whiteness of both skin and flesh, and unexcelled table quality.
Sixth. Great vigor in growth and solidity of tuber, enabling it to resist disease and not in a remarkable degree.

Lastly. Uniformity of size, which is much above the average.
The remark of the editor of The Rural New-Yorker in this connection is significant: "We do not care to introduce any of the Rural seedlings until we are satisfied that they are better than any of the kinds already in the market."

Prices for immediate delivery, per barrel, $\$ 15$; per bushel, $\$ 7$; per half bushel, $\$ 4$; per peck, $\$ 2.50$; per half-peck, $\$ 1.50$; per pound, 50 cents. By mail postpaid, one pound, 60 cents; three pounds, \$r.50.

## SQUASE, "PIKE'S PEAK." (The Sibley.)

We again call attention to this novelty, introduced last season. It originated, we are told, in Missouri, and by reason of its peculiar shápe and proximity to the Rocky Motintains, was first named "Pike's Peak." The seed is of very peculiar shape and color, and the Squash is entirely original and distinct, having the stem at the swelled end. The shell is hard and flinty, very thin and smooth. The flesh is solid, thick, a brilliant orange in color, and the very best of edible quality. The weight ranges from eight to eleven pounds. It ripens simultaneously with the Hubbard, though the quality is considerably improved if the squashes are housed a few weeks before using. This is a most attractive and valuable variety, and is meeting with much favor. Per oz., 25 cents ; per 1b., \$2.75.

## STACHYS TUBEREFERA (ChOTO-Gi.)

## Roots Only )

This is a new vegetable-not a new strain of an old sort. It is a native of Northern Africa, and belongs to the mint family, but unlike any other of that family, it produces fleshy, tuberous roots, which are excellent prepared as fritters, or for pickling. The plant is quite hardy, and produces abundantly without any special cultivation. Per oz., io cents; per lb., $\$ 1$.

## PEACH'TOMATO.

This tomato is represented as one of the strangest freaks of nature. It resembles a mediumsized peach in size, form and color, with a firm, fleshy texture, giving it a fruity appearance that makes it extremely handsome. The entire fruit is tender, free from core around the stem, and of very superior quality, having a delicious fruity taste, mingled with a sub-acid tomato flavor. Will be found desirable for the table, and particularly valuable for exhibition purposes. Per packet, 10 cents ; 1/8 oz., 25 cts.; $1 / 4 \mathrm{oz}$., 50 cents ; I oz., $\$ \mathrm{I}$.

## BUFFALO GRASS. (Buch1œ Dactyloides.)

This is the celebrated grass of our western plains, upon which immense herds of buffalo and wild cattle live for a considerable portion of the year. It very rarely produces seed, and wher.
 it does, only in minute quantities. It is of a short, dense growth, and completely covers the ground, furnishing a very nutritious food for cattle and buffalo. It is well adapted for withstanding long and severe droughts. The foliage is very fine and soft, and would undoubtedly make a fine lawn for dry banks. It should be tested in all localities, both for lawns and for grazing, and will doubtless be found very valuable and enduring. Per oz., \$r.

## THE RUURAI, NEW-YOREEER CROSS-RRED AND HIYBRID WYEEATS.

These very interesting new wheats (including several varieties of wheat-and-rye parentage) are fully described and illustrated on page 48 and the plate facing it.

## NEW JAPAN BUCKWHEAT.

Very productive, with large grains. See Cereals, page 47.

## PRINGIE'S PROGRESS OATS.

Dwarf and very productive. See Cereals, page 47.
WILD RICE, (Zizania Aquatica.)
A valuable forage plant for swamps or inundated lands. See page 5 r.

## Vegetable Seeds.

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

See page 42 of this catalogue for complete assortments of Vegetable Seeds of approved and choice sorts, for from $\$ 5$ to $\$ 25$.

## Asparagus.

## Asperge. Esparrago. Epargel.

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


Every fall a good dressing of coarse manure should be applied after the tops have been cut, and in the spring forked in. The roots need the benefit of some foliage during the year, for if every sprout is persistently cut as it appears, the roots weaken and die and there will be no Asparagus next year.

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
${ }_{15}$ Conover's Colossal. The most approved and standard sort. The
famous Argenieuil of the French proves to be identical with it . . . \$0 1o \$0 15 \$0 40 Two year old roots
. Per 100, \$1 ; per 1,000, \$7
16 Palmetto. Of southern origin ; very desirable bright green Asparagus $30 \quad 80 \quad 300$ Two year old roots

Per 100, \$1.50; per 1,000, \$10.

## Artichone.

Artichaut. Alcachofa. Wrtifiofe.
Culture.-Deep, rich, sandy loam, with plenty of well-rotted manure. Sow seeds in April and May, and when large enough, transplant into rows three to four feet apart and two feet in the rows. They reach maturity the second year. Cover with litter when cold weather commences, first tying up the leaves so that they will occupy less space, and in spring fork in a dressing of manure. It is an excellent vegetable and easily grown, thriving in any situation, provided the heads are cut oft and used as fast as they get ready; if left to ripen on the plant they will exhaust it, and no more are produced that season. Heads are unfit for culinary purposes after the flowers expand; hence the indifferent opinion entertained of this vegetable through these being cooked after they have passed the proper stage, when they are quite tender and delicious.
${ }_{21}$ French Green Globe. The standard and best variety
22 Large Green Naples. Large; light green.
23 Largest Paris. A selection of the Green Globe .

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
$\$ 0 \quad 30$ \$0 $80 \quad \$ 300$

## Beans.

As a farinaceous food for man, the Bean is considered as being far superior to any other legume, and next in importance to wheat.

## ENGLISH DWARF BEANS.

## Feve de Marais. Haba. Grope Bobuen.

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


## DWARF OR SNAP BEANS.

## Haricots Nains. Frijoles. smp=9aguen.

Culture.-About the first of May select a warm, dry sheltered spot; dig and manure slightly; make drills two inches deep and two feet apart; drop the beans three inches apart in the drill, and cover not more than two inches deep. Keep hoed, when not wet, and the weeds killed. Sow every two weeks for a succession.
${ }_{3} 6$ Ne Plus Ultra. An Per qt. Per pk. Per bu. extra early sort. extra early sort; green, full flat pods; exceedingly productive ; also suitable for forcing. . \$0 $30 \quad \$ 1 \quad 25 \quad \$ 450$
38 Best of All. Early and of superior quality ; round, green fleshy pods.

30

DWARF OR SNAP BEANS-Continued.ing of the Greens. Of more dwarf habit than No. Io6, quite as earlyand even more productive60
50 Early Dun Colored. Great yielder, with flat pods
Per qt. Per pk. Per bu.

$\begin{array}{llll}\text { Per qt. Per pk. Per bu. } \\ \$ 0 & 25 & \$ 1 & 25\end{array}$
52 Early Yellow Six-Weeks. Resembles the "Mohawk" save in colorLlat pods. Yellow Six-Weeks. Early ; the leading market sort ; full, flatgreen pods$\begin{array}{llll}25 & 1 & 25 & 400\end{array}$25 I $25 \quad 400$
56 Marblehead Dwarf Horticultural. Improved strain
20 I 00 - 3
Red Kidney. Useful either green or ripe ; flat pods
I 25 ..... 450Low's Champion. Very productive, with perfectly stringless, large,green, flat podsThorburn's Extra Early Refugee. This invaluable new strain hasall the superior qualities of the famous Refugee, and is fully two weeksearlier in podding; it is a sure bearer. (See cut, page iI)
$200 \quad 700$and largely grown for main crop; round pod$25 \quad 125 \quad 400$
Golden Refugee. Round pods of light color; of strong growth, and very desirable ..... $\begin{array}{llll}25 & 1 & 50 & 500\end{array}$
Galega. An improved Refugee ; larger and more productive$30 \quad 125 \quad 400$
Extra Early Maine. A new, small kidney shaped variety; valuable asa string, baking, or soup bean
25 I 25400
72 Mexican Tree Bean. Productive white sort
White Valentine. Prolific, and has white seeds; can be used as a shell30 I $50 \quad 500$bean
25 I $00 \quad 350$
White Scimeter. Very productive snap ..... 25
100
White Kidney. Excellent, either green or ripe ..... 25 .....
350 .....
350
White Marrow. Good as either a string or shell bean
50
Dwarf Wax Beans.
82 Black-Seeded Wax. Very early and delicious; round yellow pods$\begin{array}{lllll}30 & 1 & 50 & 500 \\ 30 & 1 & 75 & 6 & 00 \\ & & & \\ 30 & 1 & 50 & 5 & 00 \\ 30 & 1 & 50 & 5 & 00 \\ 30 & 1 & 15 & 6 & 00 \\ 30 & & 7 & 75 & 6 \\ 30 & \text { 1 } & 75 & 6 & 00 \\ 40 & 2 & 00 & 7 & 00 \\ 30 & 1 & 75 & 6 & 00 \\ 30 & 1 & 75 & 6 & 00 \\ & & & & \\ 40 & 2 & 00 & 7 & 00\end{array}$
White-Seeded Wax. Flat yellow pods
Large round pods of good quality ; early
24 Black-Seeded Golden Butter Wax.j8 Speckled-Seeded Golden Wax. Very early; round golden podsIvory Pod Wax Very early; round ivory white pods-
Dwarf Flageolet Beans.
104 Improved Green-Seeded. Used extensively by the French as a shellbean when in the green state ; they are far superior to Limas . . . . .
Wonder of France, Green-Seeded. Long straight pods of livelygreen; early and fine

108 Canadian Wonder, Red-Seeded. Large, broad, flat, green pods ; quite prolificCrystal Wax. Of rather spreading habit, with round pods
Flat yellow stringless pods30
175 ..... 6 ooito White Frolifich, White-Seeded. Used as a shell bean when in thegreen state3030
I 75 ..... 6 oo
I 25
,
Refugee or 1,000 to 1. Medium to late; very productive and tender,
Date Wax. Very early; long yellow stringless pods .
I. 50500

## POLE OR RUNNING BEANS.

## Haricots a Rames. Frijole de Bejuco. Stangen= Bognten. $^{\text {a }}$

Culture.-Sow as soon 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 four feet apart each way. Limas should not be planted until warm weather has fairly set in. One quart of Limas will plant about 100 hills, allowing four or five beans to a hill, and of the smaller sorts about 200 hills. Poles, eight to ten feet long, should be firmly set in the center of the hills before putting in the seed.


## POLE OR RUNNING BEANS-Continued.

134 Ohallenger Lima. Thick and productive ; the best of all
${ }_{134}$ Potato Lima. Thick, round; very productive
135 Small White Lima. Small, but very excellent in quality
i36 King. of the Garden Lima. Large in pod and bean ; productive
ling. of the Garden Lima. Large in po
Dreer's Lima. Thick, and of fine quality
Dreer's Golden Cluster. Very productive ; large, golden yellow, fleshy and tender pods
${ }_{153}$ White Dutch Runner. Same habit as the Scarlet Runner, flowers and beans being white75 Black Wax. Has yellow pods; a superb snap bean
$\begin{array}{lll}40 & 200 \quad 700\end{array}$
162 Black Wax. Has yellow pods; a superb snap bean . . . . . . . . . . 40200700
167 Giant Red Wax. Pods long, yellow and tender; very good
-O $\quad 3 \quad 25 \quad 12$ oc
White Algerian. Wax pods; great yielder. .. .......... . . 40 ${ }_{2} 2580$
Transylvania Butter. Broad, green, stringless and tender; pods from eight to ten inches long
$\begin{array}{lllll}50 & 3 & 25 & 12 & 00\end{array}$
173 Mont d'Or. Early and very productive; golden wax pods . . . . . 4
179 French Yard Long. Pods sometimes grow from two to three feet long; very curious

I 00

## Beet.

## Betterave. Remolacha. ভafatrïtien.

Culture.-Sow as early in the spring as the ground can be worked, and every two


EDMANDS' blood tURNip beet. 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 one foot to fifteen inches apart, and when well up, thin from four to six inches. The young Beets pulled out of the rows are excellent used as Spinach.

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
193 Extra Early Flat Turin. A new dwarf-growing flat beet with delicate leaves. The outside of the beet is nearly black, and the inside of a deep blood color; it is very tender, sweet and very early . .. $\$ 0$
195 Extra Early Dark Egyptian. Very early, and of rapid growth; dark blood color

5 \$0 6n \$2 oo

197 Extra Early Eclipse. Very early, round-rooted and dark red
IO 20,7 round-rooted and dark red ; Early ; of fine
206 Dewing's Extra Early. Early ; of fine
212 Early Bassano. Early ; flat, light color 20 75
213 Edmands' Early Blood Turnip. A market gardeners' strain of great regularity in shape ; deep blood skin and very dark flesh of best quality
Io $\quad 20 \quad 75$

215 Bastian's Early Turnip. One of the earliest ; light color . . . . . io
220 Early Yellow Turnip. Flesh yellow and tender . . . . . . . . . . . 10
229 Long Smooth Blood. A good late variety .
Io
$20 \quad 60$

Long Smooth Blood Improved. Of deep blood color; more uniform
and not so thick as the old sort; grows more out of the ground than in, and is highly prized by market gardeners

Kinds of which the Leaves only are used as Spinach; also very Ornamental.


## BEET-MANGEL WURZEL, SUGAR, ETC. <br> Funferrïben.

Culture.-As all Mangels require a deep soil in order to grow well, plow and subsoi?
 at least a foot to eighteen inches, and apply plenty of rich stable or Thorburn's Complete manure. Sow in May or June, in rows eighteen inches to two feet apart, and thin to eight inches in the rows. Young plants may be transplanted to fill up vacancies. Sow in addition, when the plants are three to four inches high, at the rate of 200 lbs. Complete manure, 200 lbs . bone flour and 400 lbs. salt per acre. As soon as frost occurs, dig the crop. But, in order to be well preserved for gradual consumption during the winter, Mangel Wurzels should be heaped to a height of perhaps six feet, on a dry, sloping situation; cover at first with a piece of canvas, and as the cold increases, this should be replaced by about six inches of either salt-hay, straw, sea weed, or even corn stalks. Lest this covering be displaced by the wind, a light layer of earth is necessary. So soon as this surface soil becomes frozen, about six or eight inches more of earth should be placed over the entire heap. By following up this gradual process of covering, all danger of heating will be obviated. Sow from four to five pounds to the acre.

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

| 260 | Long Yellow Mangel Wurzel. A good main crop sort |  | 15 | 40 |
| :---: | :---: | :---: | :---: | :---: |
| 263 | Long Red Mangel Wurzel. Same as the preceding, sa | 10 | 15 | 40 |
| 270 | Yellow Globe Mangel Wurzel. Large and productive; keeps well | 10 | 15 | 40 |
| 272 | Kinver's Yellow Globe Mangel Wurzel. Select type of the preceding | 10 | 15 | 40 |
| 273 | Orange Globe. Similar to No. 270, but of a higher color | 10 | 15 | 40 |
| 274 | Red Globe Mangel Wurzel. Similar to the Yellow Globe ; productive | 10 | 15 | 0 |
| 278 | Yellow Ovoid Mangel Wurzel. Of distinct shape; one of the most productive sorts | 10 | 15 | 40 |
| 280 | Golden Tankard Mangel Wurzel. Bright yellow; handsome and swe | IO | 15 | 50 |
| 283 | Mammoth Long Red Mangel Wurzel. Very large selected strain | 10 | 15 | 50 |
| 284 | Mammoth Golden Mangel Wurzel. Like above, save in color. | 10 | ${ }^{1} 5$ | 50 |
| 286 | Lane's Sugar. For sugar making or stock feeding | 10 | 15 | 40 |
| 290 | White Sugar Beet. Grows to a large size, and is useful for making sugar as well as for stock feeding |  | 15 | 40 |
| 293 | Vilmorin's Improved Sugar. A much improved strain of the preced ing; very valuable as a sugar-procucing Beet |  | 15 | 50 |

## Broccoll.

## Broccoli. Broculi. Spargelfoft.

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

The following are the sorts best adapted to this climate, and the only ones which succeed generally. We recommend No. 306 as the most certain.


## Burnet.

## Pimpernelle Petite. Pimpinela. Pimpernelf.

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

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb. 316 Garden
. \$0 Io \$0 30 \$1 00

## Brussels Sprouts.

## Chou de Bruxelles. Berza de Brusels. Mojentohf.

Culture.-Sow in May, in the same manner as Cauliflower, and transplant in July, one foot apart in the rows, which should be one and a-half feet apart. In gardens both large and small, Brussels Sprouts are without exception the very best winter vegetable that can be grown. Not the least valuable point connected with the Brussels Sprouts is that it is as hardy as the common curled Greens. The common Cabbage is hardy enough in a young state, but when full grown and hearted, frost soon destroys the largest heads, which rot and fall to pieces. Not so the Brussels Sprouts; being small and hard, it is not in the least affected by frost. The real Sprout is not much larger than a marble, and as firm and hard almost as the stalk itself. These are the sort which cooks prefer; they strip off the outer covering, cook them whole, and serve them up artistically in that fashion. When cooked through and no more, such Sprouts melt in the mouth, like the tenderest Cauliflower, and are equally as good.

Per oz. Per $\mathrm{I} / 4 \mathrm{lb}$. Per lb. 318 Best French or Roseberry. Very good \$0 $20 \$ 0 \begin{array}{lll}50 & \$ 200\end{array}$ 320 Improved Dwarf. Compact heads of fine quality
$75 \quad 250$


## BoURRACHE. Borraja. Borreta.

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

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
324 Boraga
$\$ 0 \quad 15 \quad \$ 0 \quad 30 \quad \$ 100$

## Carrot.

Carotte. Zanahoria. Miägren.
Culture.-Sow No. 330 as early as the ground can be worked; or for late crop, until latter part of July; for main crop, sow from the middle of May to ist of July. Thin out early crop to five inches in row ; main crop six to seven inches ; the rows ten inches apart for early crop, fourteen for main crop. Hoe often and deeply between the rows. Soil,
 light sandy loam, richly manured and deeply dug. Sow at the rate of two pounds to the acre.

330
Extra Early Forcing. Tender and fine:
best for early and late crops, and frames. \$0 1o \$0 25 \$1 00
Early Scarlet Horn. Very thick roots . . . io ${ }_{25}$ I 00
Half-Long Pointed. Productive and early . $10 \quad 2575$
James' Intermediate. Productive half-long pointed strain
Half-Long Stump-Rooted. An excellent sort, of good quality . . . . . . . . . . . . I
Half-Long Stump-Rooted, Nantes Strain. A popular market sort . . . Chantenay Strain. Style of Nantes; broader shoulder 1
Half-Long Stump-Rooted, Guerande Strain. Very thick and very short .... $10 \quad 25$ I oo
Half-Long Stump-Rooted, Carentan. Coreless flesh red; of fine quality 25 I oo
Half-Long Stump-Rooted, Luc. Useful main crop sort ; early and productive . . io 25 ₹00 Half-Long Danvers. Thick; of good quality and exceedingly productive .
Best Long Orange. Best for stock feeding
10
Altringham. Long scarlet; productive ... Io
Long White. Very large; for stock .... 10 20 50

## Cabbage.

## Chou. Berza de repollo. Sobr.

Culture.-Soil for Cableages should be a rich heavy loam, with good drainage. On such a soil, with an abundance of stable or Thorburn's Complete manure, excellent crops are sure to be grown. For early spring sow in fall, not too early, or the plants are liable to bolt in the spring, instead of heading ; in a month the plants will be fit to transplant to cold frames, where they are wintered, taking care in planting, to set the young plants. down to the first leaves. Transplant in spring as soon as the ground can be worked, setting the plants two feet apart one way, and from twelve to eighteen inches the other, according to the variety. If it is desirable to economize space, Lettuce


SELECTED ALI. SEASONS CABBAGE. or Radish may be sown between the rows, as they will be out of the way before the Cabbages need the room. For late or winter crops the seed is sown in May, and the plants set out in July. In this case they are set in rows two by three feet, so as to work them with 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 twelve quarts of water; then take a short handled whisk broom, dip it in the solution and sprinkle the liquid 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.

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

|  | Les | O | \$2 00 |
| :---: | :---: | :---: | :---: |
| 354 | Early York. The standard English sort . . . . . . . . . . . . . . . 20 | 50 | 50 |
| 362 | Early Large York. The standard English sort | 50 | 50 |
| 389 | Early Jersey Wakefield. Well-known and most valuable for early . 30 | I 00 | 350 |
| 393 | Early Winniostadt. A standard second early variety . . . . . . . . 20 | 50 | 50 |
| 394 | Early Dwarf Savoy. The earliest Savoy variety ; distinct and good . 20 | 50 | oo |
| 398 | Small Early Ulm Savoy. Small round deep green heads; very early . 20 | 50 | 200 |
| 402 | St. John's Day Early Drumhead . . . . . . . . . . . . . . . . . . 20 | 5 | 50 |
| 45 | Improved Early Summer. A superior second early sort; produces large and solid heads of fine quality; our strain is very superior . . . 30 | O | 350 |
| 420 | Selected All Seasons. One of the finest for second early or late, growing to a large size quickly and surely | 100 |  |
| 426 | Filder Kraut or Pomeranian Pointed Head . . . . . . . . . . . 20 | 50 | 200 |
| 432 | Fottler's Brunswick. Good solid heads, either for second early or late | 50 | 200 |
| 433 | Large Late Drumhead. A standard winter Cabbage for main crop . 25 | 75 | 250 |
| 435 | Large Fine Flat Dutch. Also a valuable main crop sort for market . 25 | 75 | 250 |
| 437 | Vandergaw's Quick-Growing Flat Dutch. A sure heading sort . . 40 | 00 | 400 |
| 462 | Thorburn's Market Gardener's Private Stock Flat Dutch. Fine strain of the immense winter Cabbage grown on Long Island for market 50 | I 25 | 500 |
| 464 | American Drumhead Savoy. A superior sort for family use in winter and spring ; of delicate flavor | 75 | 250 |
| 474 | Southern Green-Glazed. Late; makes fair heads of glossy green . . 25 | 50 | 200 |
| 476 | Red Dutch Solid. A useful sort for pickling . . . . . . . . . . 25 | 75 | 250 |
| 477 | Thorburn's Improved Stone-Head Red Dutch. Very large, solid, red heads; one of the finest strains of Red Cabbage. Per packet. 25 c. |  |  |
| 78 | Chinese Cabbage (Pe-Tsai) . . . . . . . . . . . . . . 50 | 150 |  |

## Cauliflower.

Chou-Fleur.: Coliflor. Mlumbutohi.


## Cardoon.

## Cardoon. Cardo. Garion.

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

528 Large Solid. Grows about four feet high; leaves nearly free from spines

## Chervil.

## Cerfeuil. Perifollo. Wenientauम̆.

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

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
Curled. The leaves of this are used for flavoring soups and stews, and for garnishing, same as Parsley
\$0 15 \$0 $30 \quad \$ \mathrm{I} \quad 00$
536 Tuberous. Has edible
roots



Celery.

Jeleri. Apio. Sefferic.

Culture.-Sow the seeds in a light, rich, dry border as early as the ground can be worked, in drills eight or ten inches apart, and cover the seeds about a quarter of an inch deep, rolling or treading them in if the ground be dry. When fairly out of the seed leaf, they may be transplanted to another bed, or they may be thinned out to six or eight inches apart, and let grow until wanted to plant out in beds or trenches. The beds should be kept well weeded, and an occasional soaking with water in dry weather will do the plants good. Early in July at the north, and a month or six weeks later in the Southern States, is the proper time to set the plants out in beds or trenches. Press the soil firmly against the roots. In the garden the better way is to set the plants in shallow trenches-we say shallow, for it is obviously a bad plan to remove all the good soil (as must be done in a deep trench), and put the plants in that which is poor. The plants may be set in a single row in a narrow trench, or the trench may be made into a 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 one foot apart. and the plants about eight inches apart in the rows. A bed four feet wide will take four rows of plants, leaving six inches of space on the outside of the first and last row. The bed should be made very rich with thoroughly decomposed manure. The plants will need to be earthed up two or three times; and in doing this, care should be taken not to let the earth get into the heart of the plant. In field culture the plants are set on the surface in rows four feet apart when the Celery is to be earthed up in the field for early use, and two feet apart when the plants are to be taken up and blanched in the cellar for winter use. The plants are set six inches apart in rows. The weeding is done by horse-power, and the earthing and banking up is mostly done by the plow and the spade. If not grown in beds, the best way to store is to dig trenches in a well-drained spot in the open ground one foot wide, and of a depth a few inches less than the height of the Celery. The plants are then lifted and set closely together until the whole quantity is stored. The edges of the trench should be made sloping from the tops of the plants to carry off all surface water. When severe cold weather comes on, cover with leaves, hay or straw, and place boards on the top to keep out the moisture. The covering must be put on aradually, else there will be danger of heating, and consequent decay. In such a trench

## CELERY-Continued.

the stalks wi:l blanch perfectly, and may be taken out any time during the winter. If lef: n the beds where grown, they should be protected by a heavy coat of leaves, straw, etc. The Turnip-rooted, or "Knob" Celery, needs no earthing up, and may be planted in rows one foot apart.

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
544 Improved White Plume. A variety with naturally white or light
foliage; requires but little banking up to blanch; very early and
handsome, and quite a salable sort . . . . . . Per packet, ro cts. . $\$ 0 \begin{array}{lllllll}50 & \$ 1 & 25 & \$ 5 & 00\end{array}$
erfection Heartwell. The finest and largest of the winter varieties,
either for the family or market garden . . . . . . Per packet, IO cts. . 50 I $25 \quad 500$
546 Golden Dwarf. Of fine, tender quality and handsome appearance . .
$5+6 a$ Golden Dwarf. California-grown . . . . . . . . . . . . . .
547 a Boston Dwarf. California-grown
$30-75$ 3 00

547 a Boston Dwart. California-grown . . . . . . . . . . . . 20
$1 \% 150$

Eariy Arlington. Quite early, and blanches rapidly .....
549 Crawford's Half-Iwarf. Of vigorous growth and excellent flavor
549 Crawford's Half-Dwarf. California-grown . $\quad$ Golden Self-Blanching. A fine solid variety on the style of White
$55 i$. Plume, except that it is golden yellow where the Plume is white, and
contrasts well with that sort . . . . . . . . . Per packet, ro cents . . $80 \quad 250 \quad 900$
New Rose. Fine flavored, crisp, red variety of moderate size . . . . 40 I $25 \quad 400$
Covent Garden Red. Of strong growth and good flavor .
$75 \quad 250$
Covent Garden Red. Of strong growth and good flavor
25
Manchester Red. Very vigorous in growth
vor
25
$75 \quad 250$
554 Manchester Red. A distinct variety, of fine flavor
25

57 Sandringham Dwarf White. Solid, and of good flavor 25
20.

## Giant White Solid. Grows to a large size . . . . . . . . . . . . . . 25

559 Celeri:ic or Turnip-Rooted. Has edible roots, for soups and stews .
20
$\begin{array}{lll}560 & \text { Thorburn's Giant. The best of the class; very large } .\end{array}$
25
20

## Chicory.

565 Common or Wild. Used in "Barbe de Capucin," a salad much made in France. Sown in June, the roots are transplanted in autumn into sand in a cellar. The shoots, which will come up soon, form the Barbe de Catucine $\$ 0 \begin{array}{llllll} & 15 & \$ 0 & 40 & \$ 1 & 25\end{array}$
Witloof. Sow in June ; plant the roots one inch apart, from October to the closing of the ground, in rows eight inches apart, in a trench one foot deep; cut off the leaves. Cover the roots with well-sifted soil eight inches thick, and the whole with a good layer of dung two to three feet thick. The Witloof will be produced three weeks afterwards in the intermediate cover of soil. Excellent as a salad as well as a vegetable ... . io

## Collards.

Chou Cabu. Cabu. Bratterfogl.

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

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb
WITLOOF.
568 Georgia-Grown \$0 15 \$0 40 \$I 25

## Corn Salad, or Fetticus.

## Mache. Macha o Valerianilla. Stedjarat.

Culture.-Sow during August, or early in September, in drills a quarter of an inch deep and six inches apart. If dry weather, tread in the seed lightly. Keep down weeds with hoe. Just before the first of winter, cover thinly with clean straw or leaves. A delicious hardy salad.

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
572
575
576
577

Large-Seeded
\$0 10 \$0 25 \$0 75
Small-Seeded
$\begin{array}{llll}10 & 25 & 75\end{array}$
576 Green Cabbaging
$2030 \quad 1 \quad 0$
Liettuce-Leatved . . . . . . . . . . . . . . . . . . . . . . . . . . 20 50 I 50

# Corn, Sweet or Sugar. 

Mais. Maiz. $\mathfrak{M a}_{\text {aig. }}$

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

## EXTRA EARLY.



579 Extra Early Cory. A very early $\begin{array}{ccccc}\text { Per } & \text { Per } & \text { Per } & \text { Per } & \text { Per } \\ \text { ear. } & \text { qt. } & 1 / 2 \mathrm{pk} . & \text { pk. } & \text { bu. }\end{array}$ variety, with good sized ears and large grains; excellent for market . . . . . . . . . \$ \$0 05 \$0 20 \$0 $60 \$ 1$ oo $\$ 400$ 580 Northern Pedigree. Very early and very dwarf; small ears
581 Marblehead. One of the earliest ; dwarf and short thick ears; of good quality for an early sort

| 5 | 30 | 90 | 1 | 50 | 5 | 00 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5 | 20 | 60 | 1 | 00 | 4 | 00 |
| 5 | 20 | 60 | 1 | 00 | 4 | 00 |
| 5 | 20 | 60 | 1 | 00 | 4 | 00 |
| 5 | 20 | 60 | 1 | 00 | 4 | 00 |
| 5 | 20 | 60 | 1 | 00 | 4 | 00 |

## SECOND EARLY OR INTERMEDIATE.

|  | Early Golden Yellow. A sweet corn, with golden yellow |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 599 | Crosby's. Matures after the Minnesota; fair sized ears of good |  |  |  |  |  |  |
|  | quality |  | 20 | 60 |  | os | oo |
| 8 | Pee and Kay. Ears large and thick; desirable variety |  | 20 | 60 |  | оо | -o |
| 10 | Potter's Excelsior. Good size, and a week earlier than L Excelsior |  | 20 | 60 |  | о0 |  |
| 611 | Moore's Concord. Of strong growth; ears large and filled | 5 | 20 | 60 |  | оо |  |
|  | Amber Cream. Of very strong growth, producing long and handsome ears | 5 | 20 | 60 |  | оо |  |
|  | Large Eight-Rowed. Very productive, and of superior richness of tiavor |  | 20 | 60 | I |  |  |
|  | Early Adams. Not a sugar corn, but grown extensively for market |  | 20 |  |  |  |  |

## GENERAL CROP.



## LATE.

630 Black Mexican. Very sweet, and of superior flavor; grains black . . . . . . . . . . . . . . . . . . . . . . . . . . .
634 Ne Plus Ultra. Small, but one of the sweetest sorts grown
640 Late Mammoth. Rank in growth ; large ears, rich and sweet ; of especially excellent quality

| 5 | 20 | 60 | 1 | 00 | 4 | 00 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 5 | 30 | 90 | 1 | 50 | 5 | 00 |
| 5 | 20 | 60 | 1 | 00 | 4 | 00 |
| 5 | 20 | 60 | 1 | 00 | 4 | 00 |
| 5 |  |  |  |  |  | 2 | 00

644 Egyptian. Large and of superior quality ; largely used for canning

00
650 Sweet Fodder Corn. For soiling
For Field Corn, see Cereals, page 47.

## Cress.

## Cresson. Berro o Mastuerzo. Srefie.

Culture.-Sow Nos. 698 and 700 thickly, in shallow drills, every two or three weeks. No. 698 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. 706 and 708 should be sown in damp soil; or if a stream of water can be utilized, they would be much finer; they will also thrive well in damp hot-beds. Rightly managed, their culture is very profitable.

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



WATER CRESS.

## Cucumber.

Concombre. Pepino. (5urfic.

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


## ENGLISH CUCUMBERS FOR FRAMES.

## Concombre (especes Anglaises) pour couches.

Was Packets contain from five to fifteen seeds each, according to sort.
Culture.-The following are for growing in hot-beds, or houses particularly constructed for forcing, so that a supply can be furnished during the winter months, at which time the prices are very remunerative. Sow seeds in November, December or January, according to the time they are wanted for market, taking care to give plenty of air and water. It will be necessary to fertilize the pistillate flowers with the staminate, in order to render the vines productive, as, owing to the absence of insects, they will not produce a crop under glass the same as in the open ground.

Per pkt.
766 Bismarck. Dark green ; fine forcer \$0 25 770 Duke of Edinburgh. Very large and long; dull green ; quite smooth 25 Giant of Arnstadt. Good bearer . 25 Blue Gown
Swan's Neck . . . . . . . . . . . 25
779 Swan's Neck ${ }_{785}$ Noa's Forcing. Very productive . 25
786 Improved Sion House . . . . . . 25

Prize Fighter. Standard sort 25
795 Goliath. Very prolific . . . . . . . 25
797 Telegraph. Free bearing, long, and extensively grown ; handsome .. 25
799 Lynch's Star of the West .... 25
802 Lancashire Witch . . . . . . 25
804 Cuthill's Black Spine . . . . 25

## Dandelion.

## ! Pissenlit. Amargon. Pardehfum.

Culture.-The Dandelion is a hardy perennial plant, and one of the most desirable early spring salads. Sow in early spring, in drills half an inch deep and eighteen inches apart; thin out the plants to twelve inches. Keep clear of weeds during the summer, and the ensuing spring the leaves will be fit to cut. They are best, however, when blanched, which makes them tender and destroys to some extent their bitter taste. The blanching may be done by placing a couple of boards over the rows, thus: $\wedge$. This excludes the light, and improves the greens.

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



## Exdive.

Chicoree. Escarola o Endivia. Gubiben.
Culture.-Sow in June, July and August; cover lightly. When up, thin out to eight inches apart, and give a good watering afterward if dry. When the leaves are six or eight inches long, blanch by gathering in the hand and tying together near the top with yarn or

bast. This must be done when quite dry, or they 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.

[^0]
## Egg Plant.

AUbergine. Berengena. Gicrpianze.
into a second bed, or into small pots. If that is not done, thin to four inches aparc. Do not plant out till the weather becomes perfectly settled and warm. Cool nights or wet weather will check them. Keep some back in frames for a second planting, in case of weather changing unexpectedly. Keep plants watered for a few days if the sun is hot when put out. Set out plants three feet by two.
Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.
Si2 Early Dwarf Purple. Dwarf, very early; small sized ovoid fruit
\$o 30 \$0 $80 \$ 300$ 8I5 Long Purple. Of distinct shape and fine qualite for the table
816 Round Purple. Medium, pear-shaped, pale purple; good quality
$25 \quad 75 \quad 2 \quad 50$
8ı 8 Improved New York Purple. The best large and of fine qualitv
$50 \quad 1 \quad 25 \quad 500$
S22 Black Pekin. Fruit blackish purple; dark foliage. Chinese. Small and orna mental. $\dot{\text { Winde }} 4^{J}$ I oo 400
834 Round White. Small and ornamental

| 30 | 80 | 3 | 00 |
| :--- | :--- | :--- | :--- |
| 30 | 80 | 3 | 00 |
| 30 | 80 | 3 | 00 |

## Ice Plant.

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

## Kohlrabi, or Turnip-Rooted Cabbage.

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

848 Early White Vienna. Handsome and fin Peroz. Per $1 / 4 \mathrm{lb}$. Perlb. 848 white ball. White Vienna, Extra Selected. Smooth small foliage
\$0 $25 \$ 075 \$ 250$


849 Early Purple Vienna. Purple ball..............
85 I . Large White or Green. Forms a large ball; not so fine as the preceding

| 30 | 1 | 00 | 3 | 50 |
| :--- | :--- | :--- | :--- | :--- |
| 30 | 1 | 00 | 3 | 50 |
| 15 |  |  | 50 | 1 | 50

## Kale or Borecole.

## Chou vert Frise. Col. Brätterfogl.

Culture.-Nos. 852 to 866 are cultivated and grow exactly like Cabbage. Nos. 869 and 870 suw in September for early greens. Sow No. 873 early in the spring in a hot-bed, and when from one to two inches high transplant into a bed or border that has been highly manured and deeply dug. The plants should stand two feet apart, in rows three feet apart. The soil should be kept mellow and free from weeds. Cover with litter or leaves during the winter. Plants started and grown in this way should be fit to blanch the following spring. The seed may also be sown early in the open border, and transplanted in rows (as directed above), as soon as out of the seed leaf; but they will need to be a year older than the hot-bed plants before being fit to b'anch. Sea Kale is not fit to eat till it has been blanched. The


THORBURN'S IMPROVED SIBERIAN KALE. plants are blanched either under large pots, or by banking up with sand. The mid-ribs are the parts eaten. They are cooked like Asparagus, and usually served with drawn butter. An occasional top dressing of salt is beneficial to the plants.

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



## Leek.



Culture.-Sow very early in the spring, in drills six inches apart and one inch deep. Thin out to one inch. When about seven inches high, transplant them in rows twelve inches apart, and as deep as possible, but do not cover the young center leaves. Water thoroughly, if dry when planted out. Draw earth up to them as they grow ; rich soil is required. Take up and store in earth in a cool cellar before winter weather. The seed may also be sown in September, and the young plants transplanted in spring to where they are to remain.
879 Best Large Flag Winter.
Hardy and productive .. . \$0 $20 \$ 050 \$ 200$
Summer Flag. Not hardy,
but useful for autumn .... io 30 I oo
Large Rouen Winter. A standard sort; remains long in good condition
$20 \quad 50 \quad 200$
Large Carentan. A superior variety, with dark leaves; stout and hardy . . ... $20 \quad 50200$
Large Musselburg. Much like the preceding: excellent sort $20 \quad 50=00$

## Lettuce.

## Laitue. Lechuga. ©afat.

Culture. Sow Nos. $888,889,895,897$ and 905 in hot-beds in March, and in the open
 ground as soon as it can be worked, and transplant to rows eight inches apart. Sow in two weeks' time same varieties again, as also Cos for a succession. In August, sow any of the varieties, except No. 966, which should be sown in September. In October, some of these may be planted in frames to head in winter and early spring. Always sow thin, and thin out well, or the plants will not be strong. The last spring sowing had better be grown where sown, being thinned out to six or eight inches apart. To have Cos in good order, they must be sown in a hot-bed early in the year and transplanted to a cold frame, so as to have good plants to set out at the opening of the ground They require tying for a few days, when grown, tc blanch. Lettuce requires good ground and moisture in abundance.

|  | Selected Buttercup. Quite distinct; has beautiful yellow solid heads, and is suitable for forcing or out-doors . . . . . . . . . . . . . . . . \$0 $20 \$ 00000$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 889 | Thorburn's Market Gardener's Private Stock. A selected strain of a solid large heading variety, resisting the sun for a long time before shooting up. Valuable also as an early sort, to be started under glass for early |  |  |  |  |
|  |  |  |  |  |  |
|  | - |  |  |  |  |
|  | Hubbard's Market Lettuce. A large white cabbage variety ; equally |  |  |  |  |
| 893 | Satisfaction. Resembling Salamand |  |  |  |  |
| 8 | Henderson's New York Cabbage. Gree |  |  |  |  |
|  | Early Curled Simpson. A leading early |  |  |  |  |
|  | Black-Seeded Simpson. A superior variety ; large and of light col |  |  |  |  |
|  | American Gathering. Twisted and curled leaves; fine for early and late |  |  |  |  |
|  | Laciniated Beauregard. Leaves |  |  |  |  |
| 905 | Tennisball or Boston. A well-known forcing variety ; very rapid in |  |  |  |  |
|  | Large Tennisball or Boston. A larger strain than the preceding, but not |  |  |  |  |
| 907 | Stone Tennisball. Form |  | 50 |  |  |
|  | Improved Hanson. Large heads; crisp |  |  |  |  |
|  | Tomhannock. Dis č"ect ; first-rate upright-leaved sort; leaves crimped at the edges |  |  |  |  |
| 915 | Shotwell's Prown Head. Large and handsome heads ; very hard |  |  |  |  |
| 919 | White Summer Cabbage. Close heads of good size ; fine for summer |  |  |  |  |
| 927 | Golden Stone Head A handsome head Lettuce; small and solid; for |  |  |  |  |
|  | Salamander Head. Fine compact heads, which resist the summer heat admirably |  |  |  |  |
| 945 | Large Yellow Butter, Black Seed Good for main summer or spring crop . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 20 50 I 50 |  |  |  |  |
| 949 | Large Yellow Butter, Grey Seed One of the best ; large heads up to |  |  |  |  |
| 953 |  |  |  |  |  |
|  |  |  |  |  |  |
|  | American Oak-Leaved. Very distinct, and of good fla |  |  |  |  |

## Martynia.

(For pickles.) (9emientionn.
Culture.-Sow in May, in the open ground, three feet apart in each direction, where the plants are to remain; or the seed may be sown in a hot-bed, and the seedlings afterward transplanted

Both varieties productive and fine for pickles. Pick when small and tender, and preserve the same as Cucumbers.

| Per oz. | Per $1 / 4 \mathrm{lb}$. | Per lb. |
| ---: | :---: | ---: | ---: |
| 30 | $\$ 075$ | $\$ 300$ |
| 30 | 75 | 300 |



MARTYNIA.

## Melon, Musk.

## Melon Muscade. Melon Muscatel. Gantafupen.

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

It is quite important that proper soil be selected for growing Musk Melons, as on heavy soil the quality will be poor.

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

978 Golden Perfection. A highly perfumed golden nutmeg melon ; fine . \$0 20 \$0 50 \$2 00

## 981 The Surprise. Early; oblong, with rich orange flesh of good quality .

982 Bird's Cantaloup. Productive and very large
983 Fine White Japan. Early, with light green flesh and white skin. .
984 Jenny Lind. Small, but very early and of good quality; green flesh
986 Nutmeg. Named from its shape; green flesh, sweet; good for main crop
986 Chicago Nutmeg. Of fine quality, and larger in size than the foregoing
Extra Early Hackensack. By careful selection of the earliest, this
strain has been fixed to ripen ten days earlier than the Hackensack . I 5
Hybrid Bay View. Very prolific and of great size, oblong; green flesh is
Skillman's Netted. Very early; flesh deep green, sweet and delicious. Is
Orange Christina. One of the finest orange sorts ; round; very sweet .
Ward's Nectar. Small, finely netted, dark green flesh; very early and
wonderfully fine flavored
I5
30 I 00
30 I 00
$\begin{array}{lll}30 & 1 & 00 \\ 30 & 1 & 00\end{array}$
$30 \quad 100$
30 I 00
30 I 00
100
30 I OO
30 I 00
30 I 00
altimore Market. Oblong; orange flesh, of fine quality
15
0
Emmerald Gem. Small, extra early; smooth ribbed dark green skin and
orange flesh; quality first-rate
$20 \quad 50$ I 50
Sill's Hybrid. Green flesh, sweet and of good flavor . . . . . . . . . . 15 30 I 00
Green Montreal. Large, round, netted; flesh thick and good. . . . . I5
Long Yellow Cantaloup. Yellow flesh, well adapted for the North . . 15
30 I 00
30 I 00
Banana Citron. Cucumber shaped; highly perfumed; of indifferent
quality
$20 \quad 50$ I 50
Pomegranate. Ornamental ; for perfume . . . . . . . . . . . . . . 50 I 2500

## IMPORTED ENGLISH YARIETIES FOR FRAMES.

Varieties Anglaises pour Couches.
Invincible Scarlet ..... \$o 25lo3o Monroe's Little Heath. Scarlet flesh25
1031 Dr. Hogg. Green flesh ..... 25
1033 Blenheim Orange. Scarlet flesh ..... 25
The Squire. Green flesh25251035 Sutton's Tom Thumb25

## Melon, Water.

Melon d'Eau. Zandia. Wafiermeloueb.

Culture.-Treat the same as Musk Melon, except that they should be planted eight to ten feet apart, according to variety.


GOODWIN'S IMPERIAL WATER MELON.

> 1036 Hungarian Honey. A very productive and early sort from Hungary. Valuable for northern latitudes; it is perfectly round, with dark green skin; flesh brilliant red, seeds very small; very thin rind and of first-rate quality
> \$0
> Peroz. Per $1 / 4 \mathrm{lb}$. Per lb.

> 20 \$0 40 \$1 50

1037 Green and Gold. Golden orange flesh; skin very dark green, making a beautiful contrast when cut; it ripens early, is very productive and ranks with Hungarian Honey
1038 Jordan's Gray Monarch. Largest melon grown; outside skin mottled gray ; bright crimson flesh, fine; late
Io40 Kolb Gem. Large; bright red flesh of fine quality, and a good shipper
Io4oa Pride of Georgia. Round in shape ; large, crisp; bright red flesh
1041 The Boss. Oblong, dark green ; flesh deep scarlet
-
Noks Early. Very early, obly Russian sort of small size, with red and $\quad 30$ I 00
1043 Oemler's Triumph. An early Russian sort of small size, with red and orange flesh, and quite distinct ; very small seeds, which may be eaten with the melon
1044 Volga. Light pale green, nearly white skin; a small round Russian melon, with red flesh; late Icing. Solid, with thin dark green skin; of superior quality; white seed Bark. Tough but thin rind; flesh crimson, tender and good; ships
1046 scaly Bark. Tough but thin rind fesh crimson, tender and good ships

Io49 White-Seeded Ice Cream. Very early; red flesh
Io49 White-Seeded Ice Cream. Very early; red flesh $\quad$ Io 25 25 75
1051 Phinney. Early and of fine quality ; red flesh . . . . . . . . . . . $10 \quad 25$
1053 Early Mountain Sprout. Very early, large and long; mottled skin . . $10 \quad 25 \quad 75$
1054 Johnson's Christmas. Keeps late
1056 Seminole. For description, see Novelties, page 7 . . . . . . . . . . . . 40 I $00 \quad 400$
1057 Cuban Queen. Solid and heavy; skin marked regularly; excellent quality
1060 Black Spanish. Large, roundish, nearly black; dark red flesh; early .
io69 Ice Cream or Mountain Sweet. An old and reliable sort; red flesh.
1070 Florida Favorite. A superior strain; improvement on Rattlesnake; earlier
1073 Goodwin's Imperial. One of our oldest standard sorts, with crimson flesh; quality first-rate; small, nearly round, and one of the earliest to mature
1095 Southern Rattlesnake. Obing, dark and striped; bright red flesh . $10 \quad 2575$
1099 Apple Pie or Colorado Citron. Used for preserves; green seed
1100 Citron. Round and handsome, for preserving; red secd

20
$\square$
$15 \quad 30 \quad 1 \quad 00$
$10 \quad 25 \quad 75$

60 I $50 \quad 600$
$\begin{array}{llll}15 & 30 & 1 & 00 \\ 10\end{array}$
$\begin{array}{lll}15 & 30 & 1 \\ 40 & 00\end{array}$

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

IO $\quad 25 \quad 15$
$20 \quad 40 \quad 150$
$20 \quad 40$ I 50
$15 \quad 30 \quad 100$

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


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

## Mustard.

Moutarde. Mostaza. Senf.

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


## Mushroom Spaifn.

Blanc de Champignon. Seta. Champiguourut.
Culture.-Mushrooms may be grown in cellars, under benches of greenhouses, or in sheds, wherever the tem-
 perature of $50^{\circ}$ to $60^{\circ}$ can be kept up through the winter. The bed should be made from November to February, according to the time the Mushrooms are wanted, and it requires about two months for them to begin 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, eight inches deep, and any length desired, are the proper proportions for a bed; these may be varied. Prepare the mixture of loam and manure, making the bed in layers, and pounding down each with the back of the spade. Leave this to heat through for a few days, and as soon as the heat subsides to $90^{\circ}$, make holes in the bed about a foot apart each way, into which put pieces of the spawn two to three inches in diameter; fill up the holes with the compost, and at the expiration of a week or ten days the spawn will have thoroughly diffused itself through the bed. Spread a layer of fresh soil over the heap to the depth of two inches, and cover with three or four inches of hay, straw or litter. Examine the bed often to see that it does not get dry. When water is given, it should be at a temperature of about $100^{\circ}$.
English Spawn. 12 cents per lb.; io lbs. for $\$ 1$; 100 lbs . for $\$ 9$.
French Spawn. Per 3 lb . box, $\$ \mathrm{r} .25$; in bulk, per lb., 35 cents.

## Nasturtium.

Capucine. Maranuela. Masturtium.
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 for support. The seeds are used in flavoring pickles, or as a substitute for Capers.

|  |  | Per oz. Per $1 / 4 \mathrm{lb}$. Per lb. |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1110 | Dwarf Yellow | . \$0 25 | \$0 50 | \$2 oo |
| IIII | Dwarf Crimson | 25 | 50 | 200 |
| 1112 | Tall Mixed | '5 | 30 | 100 |
| 1113 | Tall Blo |  |  |  |

## Okra or Gombo.

Gombaud. Quimbombo. Eniran.

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

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb. 1114 Improved Dwarf. Very productive; long white pod \$0 10 \$0 25 \$1 oo


## Onion.

Oignon. Cebolla, $\mathbf{3}$ miefefn.

Culture.-Sow in rich, sandy soil, in drills one foot apart, as soon as the ground can
 be worked in spring. Thin to three or four inches, using the rake and hoe frequently to keep down the weeds.

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.
IIf New Adriatic Barletta. A new small white Italian sort, said to be earliest of all the varieties
. $\$ 30 \$ 75 \$ 300$
It2I Queen. Very early small white ... $20 \quad 50 \quad 200$
1123 Early White Nocera. Somewhat larger than Queen . . . . . . . . . . . . . .
1129 Large White Portugal. Standard sort,
flat 130 Large White Globe. Large Southinort
II29 Large White Portugal. Standard sort,
flat ixhite Globe. Large Southinort strain

25
 arly Red Flat. Color of the Wethers-

II35 Large Red Globe. Southport strain arge Red Wethersfield. Half-early, and a good ilow anvers. A standard sort rather oval ; carly and a good keeper
$20 \quad 50 \quad 200$

| 1150 | Yellow Globe Danvers. Of more globular shape; keeps well ; a well known variety |  |  |  | OO |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1153 | Large Yellow Globe. Southport strain | 20 | 50 | 2 | O |
| 1154 | Yellow Strasburg. Large size; also one of the best for sets | 20 |  |  | 50 |
| 1155 | White Maggiojola. A favorite Italian variety ; of mild flavor; very large and early |  |  |  | OO |
| 1157 | Giant Rocea. Light red, productive and mild ; of very large size ; does well in the South |  | 40 |  | 25 |
| 1158 | Pale Red Bermuda. Medium size; fine and early for the South | 20 | 50 | I | 50 |
| I I 59 | Thorburn's Excelsior White Pickling. One of the best Onions for pickling |  | 75 | 2 | 50 |
| 1160 | English White Pickling. Also one of the best picklers |  | 50 |  | 0 |
| 1161 | Mammoth White Garganus or Silver Iing. Silvery white Italian |  | 75 |  | 50 |

Peroz. Per $1 / 4 \mathrm{lb}$. Per 1 lb .
1161 $a$
Mammoth Red Gargannsor "Ruby King" . . \$0 25 \$0 75 \$2 50 II6ıb Large Reddish Pompeii or "Copper King",
1162 Red Teneriffe. Early,
light brown; for the South
$25 \quad 50 \quad 250$

1163 White Teneriffe. Early, white; for the South
$25 \quad 75 \quad 2 \quad 5$
$25 \quad 75 \quad 2 \quad 5$
II65 Welsh. The leaves are used fr salad early in spring; sow early in fall


ONION SETS, TOPS, ETC.
Onion Sets and Tops are planted near the surface, in drills twelve inches apart and four inches in the rows. These last are valuable for early use, and where Onions from seed cannot be raised the first year.

These are the prices ruling in Yanuarv; later on they may be higher, owing to shrinkage and :olling.


| quart. | peck. | peck. | bushel. |
| :---: | :---: | :---: | :---: |
| \$0 20 | \$0 60 | \$I 00 | \$3 00 |
| 25 | 75 | I 25 | 400 |
| 25 | 75 | I 25 | 400 |
| 25 | 75 | I 25 | 400 |
| 25 | 75 | I 25 | 450 |

75 I $25-450$
I'otato Onions . . . . . . . . . . . . . . . . . . 25
Shallots
Per lb., 35 cents

# Orach or French Spinach. 

Arroche. Armuella.

Culture.-Sow early in spring; cultivate and use like Spinach.

| Peroz. Per $1 / 4 \mathrm{lb}$. Perlb. |  |  |
| :---: | :---: | :---: |
| \$0 15 | *\$0 30 | \$1 00 |
| 15 | 30 | I 00 |

1169 Red. Distinct ; dark red leaves \$0 15 \$0 30 \$1 00
II73 White. Pale green leaves; almost yellow.

## Parsley.

Persil. Perijil. Beteriilie.

Culture.-Soak the seeds a few hours in lukewarm water and sow early in spring and until middle of July, in drills one foot apart. Thin out the plants to four inches. To preserve in winter, transplant and set them in a light cellar or cold frame. No. 1185 should be thinned out while young, and managed the same as Carrots or Parsnips.


## Pepper.

## Piment. Pimiento. Wiefier.

Culture.-Sow in hot-bed in March, and when the soil has become warm set in rows two feet apart and eighteen inches in the rows; hoe frequently, and keep down all weeds. The plants may also be forwarded in small pots.


## Peas.

Pors. Chicaros o Guisantes. Erbjen.
Culture.- A week may be gained in earliness by sowing a quantity in moist sand,


THORBURN'S EXTRA EARLY MARKET. placed in a box in the cellar, and planting outside when well sprouted. Light, dry soil, not over rich, suits the Pea. Sow as early as the ground can be worked, and again every ten days, for succession, up to the first of June, after which there is danger from mildew. Sow in single or double rows, from four to six feet apart, according to the different heights, about an inch apart in the row, except such sorts as we note to sow thin, and four inches deep. In summer, sow six or eight inches deep. In this climate, the O'Rourke Peas, 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. 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.

## EXTRA EARLY PEAS.

 (retit Poiscy French (Petit Pois.) The true small French Pea, so extensively used in France for canning and for the table
3.\$0 25 \$0 80 \$1 $50 \$ 500$

1218 Thorburn's Extra Early Market. Our standard market garden extra early Pea; productive .... $2^{1 / 2} \quad 25$ 80 I $50 \quad 500$
1219 Rural New Yorker Very early; prolific and uniform in ripening .... $2^{1 / 2} \quad 25 \quad 75$ I $25 \quad 4$ 50
1223 First and Best. Early ; resembling Rural New Yorker
1224 Alaska. One of the vers earliest blue peas; quite productive . . . . . . . 2 25 80 1 $50 \quad 5$ oo
1228 *ipha. A n extra early wrinkled pea; sow thick. 3. 25 80 i 505 oo
${ }^{2} 238$ Daniel O'Rourke, Improved. Best strain of extra early . . ..... $2^{1 / 2} 25$ 8u I $50 \quad 500$


## EARLY AND MEDIUM PEAS.



## PEAS-Continued.

\section*{LATE CROP. <br> Height Per | Per |
| :---: |
| in feet. qt. |
| $y / 2 \mathrm{pk}$. |


| Per |
| :--- |
| pk. | | Per |
| :--- |
| bus. |}

Culverwell's Telegraph. Very large pods and peas; of excellent flavor and a great yielder ........... 4 . $\$ 040 \$ 125 \$ 200 \$ 800$ I325 Carter's Telephone. Enormous pods and peas of first class I326 *British Queen. Tall ; fine flavored

| 4. | 40 | I | 50 | 2 | 50 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 6. | 00 |  |  |  |  |  |
| 6. | 25 | 80 | I | 50 | 50 | 00 |
| 5. | 20 | 50 | 75 | 2 | 50 |  |
| 3. | 20 | 50 |  | 75 | 2 | 50 |


| I 328 | White Marrowfat. A favorite; heavy yielder. | $\ldots$ | $\ldots$ | . | 5 | 20 | 50 | 75 | 2 | 50 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| I333 | Black-Eyed Marrowfat. Very hardy and prolific | . | . | . | 3. | 20 | 50 | 75 | 2 | 50 |

## DIVARF VARIETIES-GROW WITHOUT BRUSH.

I356 *American Wonder. Extra early and productive; fine quality . I. \$0 30 \$ $100 \$ 175 \$ 6 \infty$ 1357 *Carter's Stratagem. Mammoth pods and peas of the first-
class; sow about six inches apart in the drills
5358*Abundance. Long, round, well filled pods; sow thin

$1364 *$ Minimum. Extra early and very productive . . . . . . . . $1 / 2 \quad 30$ I 00 I $75 \quad 600$
${ }_{1365}$ *Premium Gem. Extra early; straight pods, well filled .... I $\quad 25 \quad 80$ I36S McLean's Little Gem. Extra early ; straight pods ...... i. 25880 I 50500 1373 Tom Thumb. Extra early
[家 Those marked * are wrinkled marrows, and, unless otherwise stated, should be sown thicker than the round Peas, and not till the ground has become warm, as they are more liable to rot. They are the finest flavored of all Peas.

## Parsnip.

Panais. Chirivia. Wajtinafe.
Culture - - Sow as early in the spring as the ground can be worked, in rich soil, in drills eighteen inches apart. Thin to six or eight inches in the rows. Hoe and cultivate often to keep down the weeds.
$\qquad$
1380 Hollow Crown. Long roots, depressed at the top . . . . . . . . . Io
So 10
$\$ 030$
1383 Guernsey or Cup. Standard variety

- 10

1384 Long White. Standard variety . . . . . . . . . . . . . . . . 10
I 385 Maltese. Not quite as long as Long White ; one of the best sorts . . . io
I387 Abbott's Improved. Smooth and quite large; one of the best 10

20
60
20
60

I388 Early Round

## Pumpkin.

Potiron. Calabaza. Graj̃e siürbī̉.

Culture.-May be planted middle of spring, among the Indian Corn, or in the field
 or garden, in hills eight or ten feet apart each way, four seeds in a hill; in other respects, are cultivated in the same manner as Melons and Cucumbers. Avoid planting them near other vines. Peroz. Per $1 / 4 \mathrm{lb}$. Perlb. I 390 Large Cheese. Flat ; best for family use. \$0 io \$0 $20 \$ 060$
${ }^{1} 391$ Early Sugar. Fine grained, sweet and prolific ...... Io 2060
${ }^{139}$ a $a$ Monmouth County Golden. Thick, fine grained flesh; a valuable canner 20 6r
1392 Black Negro. New Hampshire Pumpkin io 25 I ou
1393 Cushaw. Salmon color ed flesh; crooked neck io $\quad 25 \quad 75$
I394 Bright Red Etampes. Medium size ; flat; fine for cooking . . . . . .
I 394 J Japan Crook-Neck. Fine keeper, of first quality ; entirely distinct in fruit, plant and seeds

50200
1395

I395 Improved Mammoth. Immense; smooth and handsome . . . . . .
15
20
I 396 Mammoth Tours. French
139. Tennessee Sweet Potato. Bell-shaped; thick white flesh; fine for pies
:398 Connecticut Field. Grown for stock; productive. Per qt., 25 c.; per bu., $\$ 4$

## Potato.

Pomme de Terre. Patata. Startofiet.

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


## INTERMEDIATE VARIETIES.

1416 Rural New-Yorker No. 2. For description, see Novelties, page $8 \ldots .{ }^{2} \quad 70015$ oo
1417 Snow Queen. Flesh and skin very white; a strong vigorous grower and good keeper .
1418 Rose's Beauty of Beauties. A seedling of Peach Blow; an enormous yielder; of large, even size, pure white flesh and good quality . . . . . . . Great Eastern. A most productive variety, of first-rate quality ; skin and

## 420 Dictator. First quality, nearly round sort, and about two weeks later than

Great Eastern

I $50 \quad 350$
i42I Rural Blush. Bluch skin, flesh slightly tinged with pink; heavy yielder
I424 Garfield. White variety; skin finely netted, giving it a beautiful appearance
${ }_{1426}$ White Star. White flesh, of floury texture
I 50

## LATE VARIETIES.

1430 Rose's New Giant. Oblong, flattened, of large size and a great yielder; white skin and flesh, shallow eyes , bhite skin and flesh; free from rot, and of superior table quality
1433 State of Maine. Very productive; white skin and flesh; free from rot, and mpire State. Wonderfully productive; flesh is very white and floury, of

1442 Thorburn's Late Rose. Still retains a fair proportion of its old-time popularity; has lately been improved and given a new lease of life

1450 White Elephant. One of our best; productive and of first quality. . .


1451 Morning Star. A seedling of Beauty of Hebron; pure white, of first-rate quality and an excellent keeper

50

## Radish.

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

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.
1485 French Break-
fast. Pink and white; very
early, and good
for forcing . . \$0 io \$0 $20 \$ 060$ 1486 Earliest Roman Carmine Turnip. Handsome; best for forcing
1487 Prussian Globe Shaped Carmine Turnip. Fine for forcing
1488*Wood's Early $\underset{\text { red, crisp and }}{\text { Frame. }}$ $\underset{\text { red, crisp and }}{\text { Frame. }}$ good for forcing $10 \quad 20$

30 I 00

I489 *Deep Blood Red
I489 *Deep Blood Red

$1490^{*}$ Deep Scarlet early and good. . let Turnip. Very early; grows quick
1494 *French Eariy Scarlet Turnip, White-Tipped. Very early for frames orout-doors io $20 \quad 60$
1495 Early White Turnip. Flesh pure white and sweet.
1497 Early Yellow Turnip. Handsome yellow variety . .
1499 Half-Long Deep Scarlet. Flesh bright and crisp . . . . . . . . . . .
1502 White Olive-Shaped. Mild and good for summer . . . . . . . . . . . IO
1505 *Long Scarlet. Very long, crisp; for frames or open ground . . . . .
1508 *Improved Chartier. Shades from crimson to white; good and tender .
1509 Long Purple. Very dark
${ }^{1512}$ Long White Naples. Slender; for summer use
${ }_{1513}$ Long White Vienna or Lady Finger. Crisp and tender in summer
${ }_{1515}$ White Summer Turnip. Roundish; large size
${ }_{1518}$ *White Strasburg Summer. Very large ; the German's favorite ...
1520 *Yellow Summer Turnip. Dull yellow, fine flesh

1525 *Gray .Gutart Gummer Good solid summer sort • . . .
${ }_{1528}$ *Giant Stuttgart Summer. Very large; the German's favorite . . . .
1530 Black Spanish, Round. Good for winter.
IO
${ }_{1533}$ *Black Spanish, Long. The popular winter sort .10
${ }_{1534}$ Long White Spanish. For winter .... 10

536 *Long Grey Laon Winter. Popular French sort
157 . Se Winter Very hand . . . . . . .
${ }_{1537}$ *Scarlet Chinese Winter. Very handsome and distinct; keeps well . .
I 539 California Mammoth. A very large white winter variety ${ }^{2} 540$ Raphanus Caudatus or Edible Pod Radish. (Rat-tailed Radish.)
${ }^{1540}$ Raphanus Caudatus or Edible Pod Radish. (Rat-tailed Radish.)
Those marked thus $\left(^{*}\right)$ are best suited for market gardeners.

## Rhubarb.

Rhubarbe. Ruibarbo. Mynbarber.

Culture.-Sow seed in a cold frame, in a fine, rich, sandy loam, about the first of March, in drills four inches apart. Keep the frame covered during nights and cold days, so that the soil will not freeze, and in six to eight weeks the plants will be large enough to set in the open ground. Transplant to a rich soil, and set in rows twelve inches apart and twelve inches in the rows. The following spring transplant again to four or five feet apart each way, and the next spring the stalks will be large enough to pull. When roots are set out, plant them four or five feet apart each way, and keep the


RHUBARB, weeds down. If roots are used, a crop may be secured after one season, and this is much better than sowing seeds where only a few plants for family use are needed; in the fall the bed should have a thick dressing of coarse manure, which is to be spaded under in the spring.


## Roquette.

## Roquette. Jaramago.

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

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb,
1546 Roquette \$0 10 \$0 30 \$1 00

## Syiss Chard, or Silver Beet.

This is a Beet producing only leaves, and is excellent used as greens. Cultivate about as Spinach, by sowing the seed in early spring, in drills about a foot apart. As it grows, thin out for use, and keep clear of weeds if success is desired. Good cultivation will increase the delicacy and tenderiess of the leaves to a considerable degree.
Swiss Charcl. Io cents per oz., 25 cents per $1 / 4 \mathrm{lb} ., 75$ cents per lb.

## Sprouts.

## Choux Verts non Pommes.

Culture.-Sow No. 1565 very early in spring, and Winter Kale in September, full directions for growing the latter will be found on page 24, under head of Kale.
1565 Spring Sprouts or English Rape. Per quart, 25 cents. Winter or Siberian. See

Kale, page 24.


## Salsify or Vegetable Oyster.

Salsifis. Ostion Vegetal. 5ajermurjel.



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

> Peroz. Per $1 / 4 \mathrm{lb}$. Per lb.
> $\$ 020 \$ 050 \quad \$ 200$

1548 Long White French
I550 Mammoth Sandwich Island. A
large and superior variety....$\quad 30 \quad 75 \quad 300$

## Scolymus.

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

Per oz. Per $1 / 4 \mathrm{lb}$. Per lb.
1560 Scolymus
\$0 $20 \quad \$ 0 \quad 50 \quad \$ 200$

## Scorzonera.

SCORZONERE. Escorconera. Garzionuurzel. 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.

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb. 1561 Scorzonera \$0 20 \$0 $50 \quad \$ 200$

## Skirret.

Chervis. 3 uctermurjer.
Culture.-Sow in drills half an inch deep, a foot apart; thin out to eight inches in the row; keep down the weeds. Take up the roots before winter, and store in sand or earth. It is a plump, fleshy root, containing a quantity of sugar, and is eaten like Scorzonera or Salsify.
${ }^{1} 562$ Skirret
Per oz. $\$ 030$

## Sorrel.

## Oseille. Acedera. Saueraupjer.

Culture.-Sow in spring, in drills eighteen inches apart, in a rich soil, and keep the flower stems cut off as they appear. It remains in the ground year after year, and only needs to be taken up and divided once in four or five years. To be cut and cooked precisely like Spinach; or it is excellent cooked with it, one-third Sorrel to two-thirds Spinach. Very nice to be eaten after it has become cool. Inasmuch as the hot sun tends to increase its acidity, a northern exposure is preferable.

Peroz. Per $1 / 4 \mathrm{lb}$. Perlb.
1.564 Garden \$ 10 \$0 30 \$ 10


## Spinach.

## Epinards. Espinaca. ©pinat.

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


## Squash.

Courge. Calabaza. Speije ァürbib.

Culture.-Sow in hills, in the same manner and at the same time as Cucumbers and Melons; the bush varieties three to four feet
 apart, and the running kinds from six to nine feet apart.
${ }^{1} 588$ Perfect Gem. Round
and handsome; fine
quality ; productive ;
good either for fall
or winter.
\$0 10 \$0 25 \$I 00
1589 Extra Early Orange
Marrow. Quite distinct; very early and of most delicate flavor; for fall and winter not as early as the White Bush
1592 Salem Valparaiso. Large oblong bright orange fruit ; of a delicate flavor

| 10 | 25 | 100 |
| :---: | :---: | :---: |
| IO | 25 | 75 |
| 10 | 25 | 75 |
| 10 | 25 | 75 |
| 10 | 25 | 100 |
| 10 | 25 | 100 |
| 10 | 25 | 100 |
| 10 | 25 | I 00 |
| 10 | 25 | I 00 |
| 10 | 25 | 75 |
| 10 | 25 | 75 |
| 10 | 25 | 75 |
| IO | 25 | 75 |
| 10 | 25 | - |
| 10 | 25 | 00 |
| 10 | 25 | 1 Oo |
| 15 | 40 | 50 |
| 10 | 25 | 100 |
| 10 | 25 | $1{ }^{\text {I }}$ |
| 10 | 25 | I |
| 10 | 2.5 | 10 |

1594 Early White Scollop Bush. A good early shipping variety
1595 Green Striped Bergen. White, with green stripes; variegated
1596 Summer Crook-Neck. Yellow fruit ; distinct, and the best for summer
I 597 French Olive. Olive shaped; golden yellow flesh, of good quality
1597
1598
1599 Pineapple. Peculiar shape; white skin and flesh; fine late sort
1600 Low's Premium Hybrid. A good keeper ; flesh of excellent flavor
1601 Butman. Salmon colored flesh; dry and fine for late
1602 Boston Marrow. Oval, bright orange; flesh yellow and fine .
r603 Hubbard. Well known and liked for late use; of superior quality
1604 Ohio. Smooth skin, salmon pink; fine dry flesh
1605 Marblehead. Resembles No. 1603, but has gray skin
75
1606 Brazil Sugar. Yellow warted skin; oblong in shape and first-rate fur summer or fall.
1606a Essex Hybrid. A fall and winter sort, crossed between Hubbard and Turban; of excellent quality
oo
1607 Red China. Of superior quality
1608 Thorburn's Japan Red Turban. Fine small bright red winter sort
1609 Canada Crook-Neck. Small well-known winter sort
160ga Winter Crook-Neck
I 0
1610 Turban. Orange yellow flesh of good flavor
I 00
I $O=$
1612 "Pike's Peak." (The Sibley.) An entirely distinct and very valuable Squash of good quality. For description, see Novelties, page 9....
1616 Mammoth Chili. Grows to an enormous size
1616 May
16r7 Errglish Vegetable Marrow. Oblong yellow fruit ; tender flesh . . . Io
5 200

## Tomato.

Tomato. Tomates. Eiebesiapief.
Culture.-Sow in hot-bed in early spring, or the seed may be sown in shallow boxes


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

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

Peroz. Per $1 / 1 \mathrm{lb}$. Perlb.
1618 Optimus. Solid and productlve; bright crimson . . . . . . . . . $\$ 0 \quad 25 \$ 075 \$ 250$ I618a Volunteer. Moderately early ; productive and of tair size; bright red
1619 King Humbert. From Italy; plum-shaped; small of size, and productive r6iga Dwarf Champion. Quite distinct in foliage and habit of growth, being compact and upright; fruits early and resembles the Acme in appearance
1620 Cardinal. Bright, glossy, smooth and solid; good size
$1620 a$ Puritan. Large, smooth, bright scariet ; a favorite Boston market sort
1621 Livingston's Perfection. Early, regular and productive ; red
1622 Livingston's Favorite. Large, smooth, productive, and a good shipper
1623 Hovey. Fine red variety; resembles the Acme
1624 Acme. Medium, red; smooth and good
1625 Livingston's Beauty. Large, smooth ; pinkish red; thick flesh and regular form
1626 Thorburn's New Jersey. One of tine finest; large, solid, smooth, bright red
1627 Essex Hybrid. Large, shining; very solid
1628 Early Advance. Bright red; medium sized, smooth, solid; very early .
1629 Paragon. Bright color; round
1630 Alpha. Very early and productive ; not very smooth
1631 Trophy, Selected. Very solid and fine in every way ; standard late sort
With Bronze Foliage. Fruit first-class.
40
25

2

1632
163
163
Improved Queen. Resembles "Paragon;" large, smooth, solid an good
Mikado. Very large, fairly smooth and solid; skin purplish red; has distinct broad foliage

25
30

Conqueror. Very early; fine fruit, of medium size
25
1664 Hundred Days. One of the earliest
25
30
1674 Yellow Plum. Round and regular; bright yellow; used for pickles . 25
1676 Golden Queen. Handsome, round, early and productive
40
1677 Large Yellow. Large, deeply ribbed
1678 Improved Large Yellow. Solid and very handsome
1683 Green Gage. Light yellow
25

68 Green Gage. Light yellow . . . . . . . . . . . . . . . .
1687 Red Cherry. Fruit about an inch in diameter, in bunches ; used in pickles
r690 Yellow Cherry. Similar to preceding, save in color
30
30

63 Red Pear-Shaped. Fruit of peculiar shape; handsome and solid
695 Whin
White Apple. Nearly white.
30
1695 White Apple. Nearly white
69 Red Currant. Very small and handsome ; for preserves
Strawberry. (Winter Cherry.) Small fruit; used for preserves
[700 Strawberry. (Winter Cherry.) Small fruit, used for preserves . . . . 30

| 250 | 800 |
| :---: | :---: |
| 75 | 250 |
| 75 | 300 |
| 75 | 250 |
| 75 | 250 |
| 75 | 250 |
| 75 | 250 |
| 75 | 250 |
| 75 | 250 |
| 100 | 400 |
| 75 | 250 |
| 75 | 300 |
| 75 | 250 |
| 75 | 150 |
| 00 | 350 |
| 75 | 300 |
| 75 | 250 |
| 100 | 350 |
| 75 | 250 |
| 75 | 300 |
| 75 | 250 |
| 00 | 400 |
| 75 | 250 |
| 00 | 400 |
| 75 | 500 |
| 75 | 300 |
| 75 | 300 |
| 75 | 300 |
| 75 | 300 |
| 400 | 400 |
| 75 | 300 |



## Turnip.

Navet. Nabo. Müben.

Culture.-For early Turnips, sow as soon as grownd opens in spring. Nos. 1766 to 1774, and also 1728, should be sown from any time in July to ist of August; but the other kinds, for winter use, may be sown from middle of July to end of August. Turnips are generally sown broadcast, but much larger crops are obtained (particularly of the Ruta Bagas) by cultivating in drills eighteen inches apart, and thinning to six inches in the drill. Sow one pound to the acre.


## Seeds of Pot, Sueet and Medicinal Herbs.

Graines d'Herbes potageres et medicinales.


## FRUIT SEEDS.



## VARIOUS VEGETABLES USED FOR PICKLES.

Differentes especes de Vegetal pour Conserves.
W要 Directions for culture of each will be found under the proper heads. For prices see body of Catalogue.

Beans, Refugee. Gherkin. Galega.
Beet, Blood Turnip.
Brussels Sprouts, best French.
Cabbage, Red Dutch.
Cucumber, Green Prolific.
Cauliflower, Early Paris.

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

Pepper, Celestial
Sweet Mountain.
Giant Emperor.
Tomato, Yellow Plum.
" Red Cherry. Strawberry.
Yellow Cherry.

## VARIOUS VEGETABLES USED FOR SALADS.

Differentes especes de Vegetal pour Salade.
For prices see body of Catalogue.

| Borage. | Corn Salad. | Endive, | Pepper, Sweet Spanish. |
| :--- | :--- | :--- | :--- |
| Burnet. | Curled Cress. | Lettuce, | Roquette. |
| Celery. | Dandelion. | Mustard. | Sorrel. |

# COMPLETE ASSORTIIENTS OF KITCHEN GARDEN SEEDS FOR PRIVATE FAMILIES, 

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



## GRASS SEED.

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

Grass mixtures for the formation of permanent pastures, etc., are made to order, according to soil and location.

The prices of some varieties may change as the season advances. Per
Agrostis canina. (Rhode Island Bent Grass.) A valuable grass for lawns. For
lawns, sow three or four bushels to the acre ; for pasture, one to one and a-half
bushels. See "Formation of Lawns," page 46. (I2 lbs. to the bus.) . . . . . $\$ 3030$ oc
Agrostis stolonifera. (Fiorin, or Creeping Bent Grass.) Valuable as a mixture with other pasture grasses, as it will thrive in moderately moist land on which watet does not stagnate. We find it also the best sort for croquet grounds, and smal door yards or grass plats. Same quantity as the preceding. (is lbs. to bus.)
Agrostis vulgaris. (Red-Top Grass.) A valuable permanent grass as a mixture in e:ter meadows, pastures or lawns, growing in almost any soil, moist or dry, and standing well our hot climate. Same quantity as above. (I4 lbs to bus.)
Fancy Heavy Red-Top Grass, absolutely clean seed
I5 900
20 I3 00
Aira crespitosa. (Hassock Grass.) A coarse grass, preferring stiff and marshy bottoms, and thriving well in moist and shady woodlands. In England, doormats are formed of it by the rural cottagers. 30 lbs . to the acre
$18 \quad 1300$
Aira flexuosa. (Wood Hair Grass.) Delights in high and rocky hills; is of little agricultural value except for sheep pasture. 30 lbs . to the acre .
$18 \quad 1300$
Alpecurus pratensis. (Meadore Fox-tail crass.) One of the very best grasses for fermanent pasture, and thrives to perfection on lands of an intermediate quality as to moisture and dryness it a'so stands the high summer heats without buining. 25 lbs . to the acre
$30 \quad 2500$
Alopecurus agrestis. (Slender Fox-tcï̈ Grass.; An averall late flowering grass. 20 lbs , to the acre . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
Ammophila arenaria. (Beach Grass.) Valuable on the sandy sea shore, canal tanks, etc. It serves, with its tough, wide-spreading and thickly matting roots, to form natural and permanent embankments. Is of no other agricultural value
Anthoxanthum odoratum. (Perennial Sweet Vernal Grass.) For a mixture with pasture grasses, it is valuable on account of its vernal growth, and also for continuing to throw up root foliage until late in the autumn. For meadows its chief merit is its fragrant odor, which the leaves emit when partially dried, thus sweetening hay. It is a vegetable condiment, rather than a grass of much nutritive value. Io lbs. to the acre when mixed with other sorts
$85 \quad 7500$
Anthoxanthum odoratum puelli. (Annual Sweet Vernal Grass.) Much smaller than the perennial, and of much less talue, lasting one year only. 20 to 25 lbs . to the acre
$30 \quad 2500$
Avena elatior. (Tall Meadow Oat Grass.) Most valuable for pastures on account of its early and luxuriant growth; it produces an abundant supply of foliage, which is relished by cattle early and late. 50 lbs . to the acre. ( I 3 lbs . to bus.) .
Avena flavescens. (Yellow Oat Grass.) Will not thrive well when sown alone, but with other species, such as Crested Dog's-tail, Sweet Vernal, etc., it becomes desirable for dry meadows and pastures. About $25,1 \mathrm{lbs}$. to the acre
$25 \quad 2000$

Beach Grass. See Ammophila arenaria.
Bermuda Grass. Suitable only to our Southern States (where it is very valuable) or the tropics; will not endure frost. On application we will give further information and quotations for larger quantities; to save time, please state number of pounds required

175
Blue Grass, English. See Festuca pratensis.
Blue Grass, Kentucky. See Poa pratensis.
Bromus pratensis. (Meadow Brome Grass) Suitable in mixture for high and dry meadows. 30 lbs . to the acre

## GRASS SEED-CONTINUED.

Bromus mollis. (Soft Chess.) Suited to sandy land . . . . . . . . . . . .
Bromus Schraderi. (Rescue Grass.) Thrives in any soil, but prefers that which is wet or moist. In England four or five green crops are cut in a year, and every time it is cut another crop shoots from the roots. All kinds of stock eat it freely. 30 lbs . to the acre
Cynosurus cristatus. (Crested Dog's-tail Grass.) A valuable grass for sheep pastures, on dry, hard soil and hills. It also belongs to the family of lawn grasses. 25 lbs . to the acre 3300
Dactylis glomerata. (Orchard Grass.) Less exhausting to the soil than Timothy, and will endure considerable shade. It blossoms about the same time as Red Clover, making it on that account a desirable mixture with that plant ; it is exceedingly palataole to stock of all kinds, and its powers of enduring the cropping of cattle commend it as one of the very best pasture grasses. 3 bushels to the acre. ( 14 lbs . to bus.)
Dog's-tail. See Cynosurus cristatus.
Festuca duriuscula. (Hard Fescue.) Not very productive, but it is of a very fine quality, and thrives well in dry situations where many other grasses would fail, thus making it a desirable pasture variety. 30 lbs . to the acre
$20 \quad 1400$
Festuca elatior. (Tall Fescue) Succeeds best in moist, alluvial and strong clay soils, and in shady ravines; on moist rocky sea-coasts is considered one of the most valuable pasture grasses; it is a fortnight later in ripening than $F$. pratensis. 40 lbs . to the acre

```
3) 2500
```

Festuca heterophylla. (Various-leaved Fescue.) A very early grass, native to Germany. A valuable sort for permanent meadows and pastures on high ground. 40 lbs . to the acre.

252000
Festuca ovina. (Sheep's Fescue.) Grows freely when in high, dry and open pastures. Its chief merit for sheep pasture is that it occupies land which better grasses refuse. 30 lbs . to the acre .
Festuca pratensis. (Meadow Fescue or English Blue Grass.) A highly valuable species for permanent grass land. It does not, however, attain to its full productive power till the second or third year, when it far exceeds most other sorts in quantity of its produce and nutritive matter. It is relished by live stock, both in hay and pasture. 40 lbs . to the acre
Festuca rubra. (Red Fescue.) The essential distinction of this Fescue is its creeping roots, which, in dry and sandy soils, are often as strong as those of the common Couch Grass. Well adapted for gravelly banks and dry slopes. 25 lbs . to the acre
Festuca tenuifolia. (Slender Fescue.) Flourishes well on dry and sterile soils. It is well suited for large bleaching greens, lawns, etc. 30 lbs . to the acre
Fowl Meadow Grass. See Poa serotina.
Fox-tail. See Alopecurus agrestis.
Holcus lanatus. (Meadow Soft Grass.) Inferior to many other sorts, but has the merit of easy culture, and accommodates itself to all descriptions of soils, from the richest to the poorest. 4 bushels to the acre. ( 7 lbs . to bus.)
Hungarian Grass. See Panicum Germanicum.
Johnson Grass. See Sorghum Halepense, page 50.
Lolium Italicum. (Italian Rye Grass.) One of the most valuablegrasses in Europe, being equally suited to all climates. In England it is considered the best known grass to cut green for soiling, affording repeated large and nutritive crops. We recommend it here for use in pasture mixtures. 50 lbs . to the acre
Lolium perenne. (English Rye Grass.) Is the staple grass of Great Britain, entering largely into the composition of many of the richest meadows and pastures. Its natural adaptation to almost all cultivated soils, and its early maturity, is the reason it has hitherto been so extensively cultivated in preference to many other equally nutritious sorts. 3 bushels to the acre. ( 24 lbs to bus.).
Oat Grass. See Avena elatior.
Orchard Grass. Dactylis glomerata.
Phalaris arundinacea. (Reed Canary Grass.) Grows well by the side of rivers, alluvial marshes, ditches, etc. 25 lbs . to the acre

## GRASS SEED-CONTINUED.

Per
Panicum Germanicum. (Hungarian Grass.) One of the most valuable annual soiling plants. It will grow in any ordinary soil, withstands drought well, and in this latitude may be sown as late as the first of July, and yet produce a large green crop. $\mathrm{I}^{\mathrm{T} / 2}$ bushels to the acre. ( 48 lbs . to bus.) . . . . . . . . . . . . . $\$ 0$ Io $\$ 450$
Phleum pratense. (Timothy.) A grass so well known needs no description, except that, for a hay crop on moist, peaty, or clay soil, it will produce a larger crop than any other sort. It is not so well suited for light, sandy soils. $1 / 2$ bushel to the acre. ( 45 lbs . to bus.) . . . . Price variable, from $\$ 2.50$ to $\$ 3.50$ per bus. .
Poa aquatica. (Water Meadow Grass.) This is an excellent pasture grass for
very wet situations. 20 lbs . to the acre
Poa compressa. (Canada Blue Grass.) Differs from the Kentucky variety in its flattened wiry stems. By reason of its creeping rootstalks it forms a fine turf; recommended in all pasture mixtures on dry soils, and thrives well on clay or hard trodden and poor soil
Poa nemoralis. (Wood Meadow Grass.) The early growth of this grass in the spring, and its remarkably fine, succulent and nutritive herbage, recommend it strongly for pastures. Thrives well under close feeding. 30 lbs . to the acre . .
Poa pratensis. (Blue Grass.) It is also known as Green Grass, June Grass, etc., and thrives on a variety of soils, but does best in dry and somewhat shady locations. It requires several years to become well established in the ground as a pasture grass. Very valuable for the Southern States, as it will stand the hottest summers. $I / 2$ bushels to the acre. It is also a most valuable grass for the lawn, for which purpose from three to four bushels of clean seed to the acre should be sown. (I4 lbs. to bus.) Fancy cleaned seed
$35 \quad 3000$

I8 1000

3530 oo
$18 \quad$ IO 00
$25 \quad 2000$
Poa trivialis. (Rough-Stalked Meadow Grass.) The superior product of this grass over many other species, its highly nutritive qualities, and the marked partiality which oxen, horses and sheep have for it, are merits which distinguish it as one of the most valuable of those grasses which affect moist, rich soils and sheltered situations. 20 lbs . to the acre
ed Top. See Agrostis vulgaris.
Rhode Island Bent Grass. See Agrostis canina.
Rye Grass. See Lolium.
Sweet Vernal Grass. See Anthoxanthum odoratum.
Timothy. See Phleum pratense.
Fine Mixed Lawn Grass. (Central Park Mixture.) For lawns of any extent. We recommend this, our best mixture, to be sown from three to four bushels to the acre. (is lbs. to bus.) We can also make special good mixtures at lower prices . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Per bus., \$3.50
French Mixed Lawn Grass. For croquet grounds, grass plats, etc., this mixture is recommended to be sown from three to four bushels to the acre. (15 lbs. to bus.) . . . . . . . . . . . . . . . . . . . Per qt., 25 cents ; per bus., $\$ 4.50$.

## FORMATION OF LANIN FROM SEED.

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

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

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

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

One important thing ought not to be forgotten in the preparation of the ground. Let it all have a surface of about six inches alike, for nothing looks worse than to see a lawn grow all in

## Formation of Lawns-Continued.

patches. One exception, however, may be mentioned, and that is, if there be any steep slopes facing the south, or other exposed places, let the earth on them be better and deeper than on the ground level, as they are more liable to burn out. When the grass becomes well established, it should be frequently cut. The oftener you mow, the finer your grass will be.

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

To Grass a Bank or Terrace.-For each square rod, take a pound of lawn grass seed and mix it thoroughly with six cubic feet of good dry garden loam. Place in a tub, and add liquid manure, diluted with about two-thirds of water, so as to bring the whole to the consistency of mortar. The slcpe must be made perfectly smooth, and then weil watered, after which the paste should be applied, and made as even and as thin as possible.

## CLOVERS. <br> Per

Alfalfa. (Lucerne.) This is the same as Lucerne. It requires a deep, rich soil, Per lb . 100 lbs . and in such will produce several crops every season. Io to 15 lbs . to the acre.$\$ 025 \$ 2000$
Alsike Clover. (Trifolium hybridum.) Resembles in growth, duration, etc, the Red Clover ; thrives well in cold, wet and stiff soils. Io lbs. to the acre .... 25 is oo
Bokhara Clover. (Melilotus alba.) A most valuable sort for soiling. It grows from three to five feet high, and if sown in rich soil, may be cut three times; lasts two years, or more if cut before flowering. Io lbs, to the acre
Crimson Clover. (Trifolium incarnatum.) An annual with crimson flowers. Sown late, it furnishes an early green fodder; excellent for soiling. 20 lbs . to the acre 201500
Japan Clover. See Miscellaneous Seeds, page 49.
Large Red or Pea-Vine Clover. (Trifolium pratense.) The English Cow Grass; a variety for plowing under . . . . . . . . . . . . . . . . . . . Price variable .
Medium Red Clover. (Trifolium pratense.) Is a perennial, but of very few years duration: nutritious, and valuable in moist locations . . . . . . . Price variable .
White Clover. (Trifolium repens.) Valuable for lawns and pastures. . in in
Yellow Trefoil. (Medicago lupulina.) May be cultivated either alone or with other grasses. Requires about the same treatment as Clover. $I_{5} \mathrm{lbs}$. to the acre

BIRD SEEDS, ETC.
$25 \quad 1800$

Prices variable.
Canary. (Phalaris Canariensis)
Mixed Canary Seed
Hemp. (Cannabis sativa)
Lettuce Sexl
Lettuce . . . . . . . . . . . . . . . . . . . Per oz., io cents
Maw, Blue Poppy. (Papaver Rhaas) Peroz,
Rhcas . . . . . . . . . . . . . . . . . . . . 20
Millet, American. (Panicum miliaceum) . . . . . . . . . . . . . . . . . . . . 10 . 500
White French
IO 00
Red French
600
Rape. English. (Brassica Napus) . . . . . . . . . . . . . . . . . . . . . . . . 15 Io 00

Rough Rice. (Oryza sativa) . . . . . . . . . . . . . . . . . . . . . . . . . Is io 00
Vetches for Pigeons . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . IO 500
Preparea Food for Mocking Birds
Gravel for Cages
Sunflower Seed for Parrots Per quart . Per quart, 6 cents.

ESCULENT ROOTS AND PLANTS.


## VEGETABLE PLANTS.

Jersey Wakefield Cabbage. Cold frame plants, ready from middle of March on . . . \$i 25
\&
Thorburn's Early Snowball Cauliflower. Cold frame plants, ready from March Isth 3 oo
Hot-bed plants, ready from April I5th . I 50
Thorburn's Private Stock Cabbage Lettuce. Cold frame plants, ready from Mar. Isth I 00
White Vienna Kohlrabi. Hot-bed plants
75
Egg Plants, Tomato and Pepper Plants in season.

## CEREALS.

** Grain in quantities of one-half bushel and upward should be shipped in canvas bags, which we can supply at following rates: cne-half bushel, 15 cents; one bushel, i 8 cents; two bushels, 20 cents. Customers will please add cost of bag's to remittance when ordering.


Rlunt's Prolific. Valuable sort for fodder
Chester County Mammoth. Very large, late, yellow Dent
Early Yellow Canada. (Flint).
Golden Dent. Western grown .
Golden Beauty. (Dent.) Large and productive
Hickory King. Large grain and small cob; white Dent
King Philip. Early dark yellow Flint
Long White Flint or Sanford
Longfellow. (Yellow Flint.) Small cob and large grain
Long Yellow. (Flint.) The standard sort .
Mammoth White Surprise. Very large, dented; deep grains
Maryland White Dent. Large, deep grain, late
Queen of the Prairie. Very early Dent ; Eastern grown
Self-Husking. Very early, amber-colored; shelled only
Thoroughbred White Flint. Is of such spreading habit that not
more than one kernel should be allowed to grow in a hill. Its great
suckering habit, breadth of blade, and smallness of stalk recom-
more than one kernel should be allowed to grow in a hill. Its great
suckering habit, breadth of blade, and smallness of stalk recommend it as a fodder plant, while for ensilage purposes it is the most valuable variety now grown

Per Per Per Bus. Ear. Quart. Shelled. \$0 o5 \$0 I5 \$1 75
$05 \quad 15 \quad 200$
$05 \quad 15 \quad 200$

## CORN. ( 56 lbs. to bushel.) All northern raised sorts-

$05 \quad 15 \quad 200$
Champion Two-Rowed Vermont. Early and prolificQuart. Bushel that the grains are about double the size of the largest wheat 300

## BUCKWHEAT. (48 lbs. to bushel)-

American Silver Hull. Earlier and more productive than the common . 15 I 50
European Silver Hull . . . . . . . . . . . . . . . . . . . . . . . . . ${ }^{15}{ }^{1} 50$
Dark Glazed. From Vermont . . . . . . . . . . . . . . . . . . . . . 15 I 00
New Japan. Enormously productive ; the grains are much larger than any other variety
300
Virginia Horse-Tooth. For fodder .
Sweet Fodder Corn. (Measured bushel) . . . . . . . . . . . . . I 75
Rice Pop-Corn . . . . . . . . . . . . In ears, per lb., 12 cents.
OATS. ( 32 lbs to bushel)-
Per Per
Quart. Bushel.
Welcome. Heavy white grain, and very productive . . . . . . . . . . . . \$0 15 \$I oo
Clydesdale. Very early and remarkably heavy white oat . . . . . . . . i5 I 00
Pringle's Progress. A cross between Excelsior and Chinese Hulless;
dwarf and very productive . . . . . . . . . . . . . . . . . . . .
20 I 50
Canada White . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10 85 . Mixed . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10 70
RYE. ( 56 lbs . to bushel.) -
Spring . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $15{ }^{15} 75$
Winter Excelsior . . . . . . . . . . . . . . . . . . . . . . . . . . . ${ }_{15}{ }^{15} 25$
WHEAT. ( 60 lbs lo to bushel) -
Armstrong or Landreth (Beardless). Winter . . . . . . . . . . . . . $15{ }^{2} 00$
Michigan Bronze. Heavy red grain. Winter . . . . . . . . . . . . . 30350
Horsford's Pearl. Light amber grain (beardless). Winter . . . . . . . $30 \quad 350$
New York Spring. Spring . . . . . . . . . . . . . . . . . . . . . . $15{ }^{2} 50$
White Russian (Beardless). Spring . . . . . . . . . . . . . . . . . . 20.250
Saskatchewan (Beardless). " . . . . . . . . . . . . . . . . . . 20.250
Scotch Fife (Beardless). ". . . . . . . . . . . . . . . . . 20.250

# The Rural New-Yorker Cross-Bred and Hybrid Wheats. 


#### Abstract

Mr. E. S. Carman, of The Rural New-Yorker, began his work of improving wheats some fourteen years ago. The first step taken was to secure the leading varieties of this and other countries and test them side by side in small plots. After testing in this way some 200 so-called varieties, that known as Armstrong, a beardless, white-chaff variety, with amber grain, was selected for the mother plant in the proposed crossings then begun and since continued. They were effected in a thoroughly scientific, painstaking way that has left no room for doubt as to the character of the results. The anthers were removed in every case while they were quite green; the heads operated upon were covered with strong tissue paper immediately after, which was removed only for the purpose of applying the pollen from the variety with which it was desired to effect a cross. In this way hundreds upon hundreds of crosses have been made during the past ten years. Most of them have from time to time been rejected as of no greater value than the well-known kinds already in cultivation ; the others have been retained, with the intention of introducing them to the public as fast as they should become fixed in character and give promise of excellence. Of the pure wheat crosses, Nos. $50,51,53$ and 55 are the first that have ever been offered.

Nos. 2 and 3 are hybrids between rye and wheat, though the rye blood does not manifest itself in any way. They are essentially pure wheats. The history of the rye-wheat hybrids-the first ever known to have been effected-is briefly this: Five or six years ago Mr. Carman, scarcely hoping, much less expecting, to meet with any success, used rye pollen on one of his cross-bred wheats. Nine hybrid kernels resuited. These produced eight plants, seven of which had every appearance of wheat (though all were unlike); the eighth plant was neither rye nor wheat, though possessing several marked peculiarities of rye, as, for example, narrow, long heads, a downy stem just beneath the head, lighter foliage and earlier maturity. This was the beginning of the ryewheat hybrids. Rye pollen was again and again used upon these, until now Mr. Carman has seventy-five different strains, the latest of which are by parentage seven-eighths rye. These hybrids, which have attracted a deal of attention both at home and abroad, appear to be very difficult to fix. What they will amount to, except as botanical curiosities, remains to be seen. Some of the heads are marvels as to size and productiveness, while others show a decided inclination towards sterility.

Now, the Nos. 2 and 3, as shown in the photographic illustration (somewhat reduced from life size) are derived from the seven plants above alluded to, which, though by blood half wheat and half rye, do not resemble rye in any respect.

While it is conceded that Mr. Carman's collection of crosses and hybrids are not approached by any other similar collection in the world (indeed, there is no record of the existence of any other rye-wheat hybrids), we have nothing to claim for those of his varieties now for the first time offered for sale, beyond what may be inferred from the appended plain descriptions; neither have we any apology to offer for the high prices which we are constrained to charge. Should they, upon trial in different sections, not disappoint our reasonable expectations as to their hardiness and prolificacy, other varieties will be offered as they shall have become fixed and propagated in sufficient quantities for introduction.


No. 2. Half wheat, half rye by parentage, though resembling wheat in all respects. Nearly as early to mature as rye. Stem purplish in color. Heads average over three inches long, eight breasts (or spikelets) to a side. Chaff white, beardless. Often four grains to a breast, always three, of medium size, amber color and apparently hard.

No. 3. Half wheat, half rye by parentage, though resembling wheat in all respects. Nearly as early as rye to ripen. Tall, yellow, stiff straw. Heads average three inches long, seven breasts to a side. Chaff brown, bearded. Three grains to a breast, small to medium size, dark amber color.

No. 50. Pure wheat cross. Early. Stem yellow. Heads average over three inches and somewhat club-shaped, seven breasts to a side ; chaff white, beardless. Generally four grains to a breast, medium to small in size, hard, and of amber color.

No. 51. Pure wheat cross. Late. Stem yellow. Heads very long, averaging over four inches, nine breasts to a side.; chaff brown, heavily bearded. From three to four grains to a วreast, medium size, amber color. Stem tall and strong.

No. 53. Pure wheat cross. Medium to mature. Stems pink. Heads average nearly four :nches. Breasts crowded-often ten to a side; chaff very clear and white, heavily bearded. Four grains to a spikelet-sometimes five--fair size, amber color. Inclined to club-head.

No. 55. Pure wheat cross. Medium to ripen. Stems yellow. Heads average nearly four inches. Eight breasts to a side ; chaff white, heavily bearded; three to four grains to a breast, fair size, bright amber color, hard. Regular heads; that is, not inclined to club.

Having secured these wheats from Mr. Carman, we expect to have them ready for delivery in September, 1889, at which time all orders will be mailed free.

Orders booked in rotation, and must invariably be accompanied by the cash.
Price for packages containing about twenty-five grains, 25 cents, or the collection of six sorts for $\$ \mathrm{~F}$.


THE RURAL NEW-YORKER WHEATS,
Nos. 2 and 3 , Hybrids-half Wheat and half Rye.
Nos. 51, 50, 53 and 55, Pure Wheat Crosses.

## MISCELLANEOUS SEEDS and SEEDS OF ECONOMICAL PLANTS.

ASPERULA ODORATA. (Waldmeister.) This perennial plant, growing about six inches high, bears a small, white, and very fragrant flower; succeeds in almost any soil. In Germany it is thought much of as imparting a certain bouquet to Rhine wine when compounded with it, making a beverage commonly known as Maitrank. Per packet, io cents.
BEANS-Common English Horse Beans. Per lb., 10 cents ; per 100 lbs ., $\$ 7$
Soja hispida. (Soja Bean.) Resembling a bean ; the haulm is stiff and the pods are produced in clusters of from two to five, and contain each four smooth oval nankeen colored seeds. This plant is said to thrive well in hot and dry weather ; very valuaable for the South for either man or beast. Per lb., 20 cents ; per ioo lbs., $\$$ io.
BROOM CORN.-Long Brush Evergreen. Broom Corn succeeds in a good deep soil, fresh but not damp; it is very sensitive to cold. Per qt., 20 cts. ; per bushel, $\$ 3$. Improved Dwarf. Per quart, 25 cents; per bushel, \$4.
California Golden Long-Brush. Grows from twelve to fourteen feet high. Per quart, 25 cents; per bushel, $\$ 4$.
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 cents ; per lb., 50 cents.
CAPER TREE. (Capparis spinosa.) Per paper, 25 cents.
CATERPILLARS. A curious plant. Of interest only on account of its curious fruit, from which its name is derived. Much fun is caused by mixing them in salads. Per paper, io c.
CHICORY-Large-Rooted. A perennial plant, remaining five or six years in the same soil, provided it is cut before flowering. It may be cut four or five times during the same season, and furnishes an excellent green fodder. Sow broadcast in autumn or spring, either alone or with any kind of Clover. Sown in drills, the roots become well developed. When they are dried, roasted and ground, they become the Chicory of commerce, and are used in adulterating coffee. Per oz., io cents ; per lb., 75 cents
COTTON-Sea Island. Per lb., 15 cents; per ioo lbs., $\$ 8$.
Tennessee Upland. 25 lbs. to the acre. Per lb., 15 cents ; per 100 ibs., $\$ 8$
COW PEAS. Adapted to Southern localities; also valuable in this latitude as a fodder plant, sheep being very fond of them when in flower; its chief value is as a green crop to plow under. $11 / 2$ bushel to the acre. Per quart, 20 cents; per bushel, $\$ 3$.
DHOURA-Guinea Corn. See Sorghum.
ESPARSETTE. See Onobrychis sativa.
ESPARTO GRASS. (Stipa tenacissima.) This is the true Esparto Grass, extensively grown in Spain and other parts of the Mediterranean countries for making ropes, etc. Per oz., 75 c .
FENUGREEK. An annual plant, and very fragrant. The seed is often sought by hostlers to give a temporary fire and vigor to their horses. It is frequently given to oxen and pigs when fattening, causing them to drink and digest their food. Considered to be good for soiling when green. Per oz., io cents; per lb., 50 cents.
FLAX SEED. Per bushel, $\$ 3.50$; per quart, 25 cents.
FURZZE. (Ulex Europceus.) The sprigs of one year's growth of this shrub furnish an excellent green fodder in winter ; grows well in sandy soils. Per lb., 50 cents ; per oz., io cents.
GUIZOTIA OLEIFERA. An annual from Abyssinia, from the seed of which oil is extracted. Per oz., io cents ; per lb., 50 cents.
HOP SEEED. Per oz., \$ $\$$.
INDIGO SEED. (Indigofera tinctoria.) Per oz., I5 cents ; per 1b., \$r.50.
IRIS PABULARIA. A foliage plant, flourishing in the driest and most arid soil. The leaves, twelve to sixteen inches long and produced three or four times in one season, are eaten by cattle, either green or dried. The seeds should be sown in beds and the young plants set out ten inches apart each way, very early the following spring, where they are to remain. It is doubtful if it will prove hardy in the Northern states, but it should certainly be tested in California and in our dry Southwestern region. Per ozo, 75 cents; per lb., $\$ 8$.
JAPAN CLOVER. See Lespedeza striata.
JUTE. An annual plant. In Bengal the fibers of this plant are used for making the coarse sacks in which coffee and sugar are packed, and also for coarse wearing apparel. It is cultivated extensively in the East Indies, China and Japan, and is now freely sown in our Southern States. It thrives in any good corn ground. Sow in drills about eight inches apart, four pounds to the acre. Requires no cultivation, as it will outstrip in growth all weeds. May be also sown broadcast, six to seven pounds per acre. Per oz., 15 cents ; per 1 b ., 75 cents.
KAFFIR CORN. See Sorghum.
LENTILS-Best Imported. Succeed best in dry sandy soil. A leguminous annual, the seeds of which are valuable for pigeons and largely used for soups. Per lb., 20 c . ; per ioo lbs ., $\$$ ro.
LIQUORICE. (Glycyrrhiza glabra.) In pods. A perennial plant, the roots of which furnish the Liquorice of commerce. Per oz., 30 cents ; per lb., \$3.
LUPINS-Blue. Used for the same purpose as the yellow variety. Per lb., $20 \mathrm{c} . ;$ per 100 lbs . $\$ 8$. White. One of the best plants known for soiling. It may be sown from April to July, and plowed under when in flower. The seed when burned is excellent manure for orange and olive trees. Per lb., 20 cents; per ino lbs., $\$ 9$.
Yellow. Less thrifty than the white variety, but still having an advantage over it in remaining green for a longer period. It succeeds well in the poorest soil, and many lands formerly poor have had their value greatly enhanced by plowing in this Lupin as a manure. Per lb., 20 cents ; per 100 lbs., $\$ 8$.

## MISCELLANEOUS SEEDS-CONTINUED.

LESPEDEZA STRIATA. (Japan Clover.) A perennial, growing about twelve inches high valuable only in Southern localities, where it thrives in any soil and in the driest seasons; it makes a fair hay and stock eat it readily when green. Per ib., 40 cents; per 100 lbs ., $\$ 35$. MADIDER. (Rubia tinctoria.) A perennial plant, the roots of which, when dried and reduced to powder, furnish a red coloring matter. If cut the second year when in flower, it furnishes a very good green fodder. Per oz., io cents ; per 1b., 75 cents.
MADIA SATIVA. An annual plant, producing good sheep pasturage; valuable in dry and warm soil. Per oz, ro cents; per lb., 50 cents.
ONOBRYCHIS SATIVA. (Sainfoin of the French and Esparsette of the Germans.) A perennial leguminous plant, belonging to the same family as Clover and Lucerne; used extensively in France as a forage plant. Requires a calcareous soil for the best results. ioo lbs. to the acre. Per lb., I5 cents; per ioo lbs., \$10.
OSAGE ORANGE. (Maclura aurantiaca.) For hedges. See page 41.
PEARL MILLET. (Penicillaria spicata.) A valuable fodder plant for the South; is enormously productive. Sow in drills eighteen inches apart, and eight to ten pounds to the acre. Per lb., 30 cents; per ioo lbs., $\$ 20$.
PEAS-Canada Field. Valuable for northern climates, for cattle feeding. Per quart, 15 cts.; per bushel, \$r.50.
POPPY-Opium. The seed furnishes about thirty-five per cent. of an agreeable sweet oil, good for eating, painting and illuminating. May be sown in spring either broadcast or in drills, covering with but little earth. Also cultivated for opium. Per oz., 20 cts.; per lb., \$1.
PYRETHRUM CINERARIEEOLIUM. The plant from which is made the Persian Insect Powder in Europe, or "Buhach" as made in California. Per oz., $\$$ r.
RAMIE-Silver China Grass. (Urtica nivea.) This is the variety now so extensively cultivated in the South for its fibre. The seed should be germinated by sowing it on cotton, floating in a tub of lukewarm water, and transferring it to a bed, screened from the hot sun. When the plants are four inches high, transplant to a field in rows four feet apart each way; and when plants are three feet high, turn them over and peg to the ground, after which cover them with the earth, and they will start in every direction, completely covering the field in a short time. Per oz., 75 cts . ; per $1 \mathrm{~b} ., \$ 9$.
REANA LUXURIANS. (Teosinte.) A valuable fodder


SIlver china grass: (Ramie.) plant from Central America, resembling in growth Indian Corn. Well adapted for all of our Southern States. Yer oz., 15 cts.; per 1b., $\$ 1.50$, per roo lbs., \$100.
SORGHUM. (Dhoura or Guinea Corn.) White-Seeded
RGHUM. (Dhoura or Guinea Corn.) White-Seeded. ............ $\$ 115 \quad \$ 1000$
Early Amber Sugar Cane. Ripens where Indian Corn matures. .....
75

Early Orange
Honduras
Stewart's Hybrid Lenk's Hybrid

Ripens about ten days after Early Amber ${ }^{15}$ Ripens twenty days later I5 800 Next to Orange in ripening 1000

Halepense. (Johnson Grass.) One of the most valuable southern fodder plants, and only recently discovered to be perfectly hardy in New Jersey. It is a rapid growing perennial. On rich soils it may be cut three or four times in a season. The best results are obtained by sowing the seed in August and September at the rate of 25 to 35 lbs . to the acre. Per lb., 20 cents; per 100 lbs., $\$ 13$.


JOHNSON GRASS.
(Sorghum Halepense.)

Yellow Branching. Is tall, nine to twelve feet, stooling from the ground like the Rural Branching or Millo Maize, but not so much. It sends out shoots also from the joints. The grain is double the size of White Millo, and of deep golden yellow color. It possesses all the vigor and vitality of other Sorghums. It is non saccharine; useful only for the large amount of forage, green feed or cured fodder that it furnishes, and for its grain. Ear'ier than the Rural Branching variety. Per lb., 20 cents; per 100 lbs ., \$12.
Rural Branching (Millo Maize.) This non-saccharine Sorghum was introduced a few years since. Its great merit is, that when cut for feeding it starts again from the remaining stumps with renewed strength and vigor; thrives in the hottest and driest localities. One of the most valuable forage plants for tropical climates. Per 1b., 25 cents ; per ioo lbs., \$15.
Kaffir Branching Corn or Sorghum. Non-saccharine, but distinctly different in habit from all others of that class. The plant is low, stocky, perfectly erect. It does not stool from the root, but branches from the top joints. The whole stalk, as well as the blades, cures into excellent fodder, and in all stages of its growth is available for green feed. If cut down to the ground, two or more shoots spring from the root, and the growth is thus maintained until checked by frost. Per 1 b ., 20 cents ; per 100 lbs ., $\$ 12$.

## MISCELLANEOUS SEEDS-CONTINUED.

SAINFOIN. See Onobrychis.
SCURVY GRASS. (Cochlearia officinalis.) Used as Pepper Grass. Per oz., 25 cents.
SERADELLA. A fine fodder, of good quality, 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. Per lb., 30 cents.
SNAILS. Used the same as Caterpillars. Per paper, io cents.
SPURRY. (Spergula arvensis.) Small annual plant, succeeding best in sandy soil. It can be used in its green state, or for hay. Butter made from the milk of cows fed on this is considered of a superior quality in Belgium and Holland. It serves a useful purpose, growing luxuriantly on indifferent land. Should be sown early in spring, 15 lbs . to the acre. Per lb., 18 cents ; per ioo lbs., \$io.
SUNFLOW ER-Large Russian. Per quart, 20 cents; per bushel of 25 lbs ., $\$ 3$.
TEASELS-Fuller's. The heads, furnished with sharp, barbed spikes, are used for combing cloth. Teasels require a good deep soil, and should be sown about April or May. In the South they may be sown in the fall. The young leaves are often used for feeding silkworms. Per lb., 20 cents; per 100 lbs ., $\$ 15$.
TEOSINTE. See Reana luxurians.
TOBACCO SEED-Connecticut Seed-Leaf
Per oz. Per lb.
Florida
. . . . . . . 2550
James River Virginia . . . . . . . . . . . . . . . $25{ }_{2}{ }_{2}$
Hester Virginia . . . . . . . . . . . . . . . . . . . . . . 25250
Maryland . . . . . . . . . . . . . . . . . . . . . . . . . . 25250
Ohio . . . . . . . . . . . . . . . . . . . . . . . . . . . 25250
Ruffled-Leap Virginia . . . . . . . . . . . . . . . . . . . $25{ }^{2} 50$
White-Stem Oronoka . . . . . . . . . . . . . . . . . . . 25250
Pennsylvania . . . . . . . . . . . . . . . . . . . . . . . . 25250
Yellow Prior . . . . . . . . . . . . . . . . . . . . . $25{ }^{2} 50$
One-Sucker Virginia . . ............. 25250
VETCHES-Spring. Sown broadcast like wheat or barley, and sometimes mixed with oats for soiling. Used in France and Canada as a substitute for peas. Also ground up into flour, after which it is mixed with wheat flour for making bread. Per qt., 20 cts.; per bus, $\$ 3.50$.
WILD RICE. (Zizania aquatica.) A native of our northern and western states. Valuable as a forage plant for swamps and inundated lands. Stock of all despriptions are fond of it when green, and also when cured for fodder. Directions for Sowing.-"Put the rice in coarse linen or cotton bags, and sink them in water for twenty-four hours. Sow in water from six inches to five feet deep, in soft mud bottom, and in places where there are but few weeds. It is useless sowing this seed except on a mud bottom, or on low marshy places, which are covered with water the year round. In running water, sow as much out of the current as possible." Per 1b., 25 cents ; per ioo lbs., $\$ 18$.
WORMS. Used the same as Snails and Caterpillars. Per paper, io cents.


Perfection Pruning Shears-The Best of All.


No. 4, Io inches . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 350


Cast Steel Trowel, Solid Shank.


## SOME USEFUL IMPLEMENTS.

For complete list, see pages 53-55.


Rose Nippers. 50 cents each.


Lang's Weeder.
25 cents each


Lawn or Daisy Rake. Cast Steel Teeth, to cut off flower heads or buds of daisies. \$3 each.

¿Davis Wire Lawn Rake. Well adapted for gathering leaves and loose grass on walks or lawns after mowing. 75 cents each.

# HORTICULTURAL IMPLEMENTS AND GARDEN REOUISITES. 

Asparagus Knives-Best English
EachAtomizers-Woodason Bellows. For the effectual application of all liquidinsecticides200
Rubber Sprinklers. For florists' use and window gardening ..... I 00
Goldman's ..... 30
Aphicide. A convenient and useful sprinkler ..... 50
Bellows-Woodason's Atomizer. (See above)
Woodason's Powder. For Hellebore, Tobacco Dust, etc.... $\$ \mathrm{I}$, $\$ 2$ and ..... 00
Jumbo Powder Gun. Made of tin; a good thing ..... 50
Bill and Brush Hooks-For heavy pruning with one hand $\$ 150$ and 200
Canes-Bamboo, 7 to io feet long; useful for plant sticks. \$I 25 per 100
Corn Knives-For cutting off corn-stalks ..... 35
Daisy or English Lawn Rakes. \$2 50 and ..... 50
Dibbles-Hard Wuod, iron pointed ..... 50
Fertilizers-Ground Bone. 5 lbs., 25 c.; 50 lbs., $\$ \mathrm{I} .25$; $100 \mathrm{lbs} ., \$ 2$; per ton, $\$ 32$.Guano. Best Peruvian. 2 lb . boxes, 25 cents ; per roo lbs., $\$ 4$; per bagor ton, according to market.
Thorburn's Floralis or Concentrated Plant Food. The best Fertilizer for general use....................................... 2 lb . boxes. . ..... 25
Complete Manure, Potato Manure and Lawn Fertilizer. See special list, page 55
Sheep Manure, Pulverized. 5 lb . package, 30 c .; 25 lb . package, $\$ \mathrm{I} 25,50 \mathrm{lb}$. package, $\$ 2$; 100 lb . bag, $\$ 3$; per ton, $\$ 45$
Forks-Digging or Spading \$1 00 and ..... 50
Hay or Stable 75 and ..... I 25
Ladies' Short-Handled 50 and ..... 100
Manure, Long and Short-Handled I 00 and ..... 50
Fruit Picker-Bevin's Patent ..... 400
Fumigator-Appleby's Improved English. ..... I 00
Garden Force Pumps-Indispensable in large gardens ..... 500
Garden Lines-Finest Braided, ioo feet ..... 75
Garden Reels-For above; of wrought iron ..... 75
Garden Pencils-Indelible Black ..... 15
Grafting Wax-In $1 / 4,1 / 2$ and I lb. packages per lb., 40 cents.
Grass Border Shears-With and without wheel. $\$ 3$ oo to ..... 450
Grass Edging Knives I. 50 to ..... 250
Grass Hooks or Sickles-American and English ..... 75
Hedge Shears-English, 8 to 12 inch blades ..... 400
Hoes-American Crescent, Handled ..... 50
Draw or Corn ..... 75
Grub. ..... 00
Onion ..... 50
Prong or Potato Hook ..... 75
Scuffle, Dutch or Push ..... 85
Triangular. Used also as Tree Scrapers ..... 75
Hose Menders-Useful article for repairing rubber hose ..... IO
Hyacinth Glasses-Various styles. (See Bulb Catalogue). $\$ \mathrm{I} .50$ and $\$ 3$ per doz..
Insecticides-Fir Tree Oil. A reliable insecticide for in-door use. . per quart, $\$ \mathrm{I}$.Gishurst's Compound. A certain remedy for green fly, scale,mealy bugs, etc., etc . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . per lb. box.50
Hellebore per pound, 35 c
Each
Insecticides-Paris Green, Pureper lb., 30 cents
Whale Oil Soap. In boxes of 2 lbs ., 30 c .; $5 \mathrm{lbs} ., 70 \mathrm{c}$.; , io lbs.,\$r; $20 \mathrm{lbs} ., \$ \mathrm{I} 75$; 100 lb. keg, \$6
Sulphur. For mildew on grapes, roses, etc. ......per lb., io cents.Tobacco Dust. For cabbage worms, caterpillars, etc.per lb., 10 cents; 25 lbs., \$I ; 100. lbs., \$3
Tobacco Soap-Highly recommended per $1 / 2 \mathrm{lb}$. tin ..... $\$ 025$
Tobacco Stems In bales of about 250 lbs . ..... 400
Knives-Asparagus, English \$I 00 and ..... I 50
Budding, Best English 75 and ..... I 50
CORN ..... 35
Grass Edging ..... \$1 75 to 250
Pruning, Best English ..... 60 to 200
Labels-Wooden Pot and Garden- ..... Per Ioo Per I,000 Per too Per 1,0004 inch.......... . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 0$ 15 \$0 60
$\$ 0$ I5 \$0 95

| $4^{1 / 2}$ inch. | 15 | 80 | 20 | 90 |
| :---: | :---: | :---: | :---: | :---: |
| 5 inch. | 15 | 80 | 20 | 100 |
| 6 inch | 20 | 100 | 35 | I 25 |
| 8 inch | 40 | 350 | 50 | 400 |
| 12 inch. | 55 | 450 | 55 | 500 |

Wooden Notched Tree-

| $31 / 2$ inch | 10 |  | 60 | 15 | 85 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6 inch | 25 | 1 | 50 | 25 | 200 |
| $3^{1 / 2}$ inch, copper wired | 20 |  | 75 | 30 | 25 |

Lawn Mowers-Hand and Horse. Special price list on application
Lawn Mower Guards-To fit any mower; to prevent injury to shrubs or plantswhen mowing\$1 30 andI 70
Lawn Rakes-English or Daisy 250 to ..... 350
Davis' Steel Wire ..... 75
Wooden. In several sizes ..... 75
Mats-Archangel $\$ 6$ per dozen ..... 60
Petersburg $\$ 5$ per dozen ..... 50
Mole Traps-Olmsted's Improved ..... I 50
Plant Sticks-Round, painted green, 2, $21 / 2,3,4$ and 5 feet; per running foot, $1^{1 / 2} \mathrm{c}$. Southern Canes. 7 to io ft . long per 100, \$1 25Pruning Chisels-With sockets100
Raffia-For tying; equal to Cuba Bast per lb., 40 cents
Rakes-French Steel. Flat teeth, not handled ..... 70
American Garden. Steel, handled ..... 80
Lawn. See under Lawn Rakes
100
Saws-Pruning. Double edge 65 andI 00
Scythes-Brush. Short blade ..... I 50
English Lawn. Cast steel, in sizes ..... 200
Scythe Stones--Round Welsh Talacre \$I 50 per dozen ..... 15
" Rifles-Triple Emery Coated \$r oo per dozen. . 10
Shears-English Pruning. O. G. pattern ..... I 50
Grass Border. With and without wheel ..... 3 oo to 450
Hand Pruning, Wiss'. Three sizes. ..... I 75 to ..... 250
Hedge. Six sizes ..... 200 to 400
Pole Pruning, Wiss'. Two sizes $\$ 275$ and ..... 375
Perfection Pruning. The best made. Four sizes 200 to ..... 350
Sheep-Extra quality English, for trimming grass ..... I 25
Shovels-Ames' Best Cast Steel. Square and diamond pointed I 25 and ..... I 50
E.ach Scissors-Grape. For trimming grapes \$I 00 and \$1 50
Pocket Pruning. Suitable for ladies' use ..... 50
Flower Gatherek's. For cutting and holding the flower. 75 and I 50
Soap--Whale Oil. See Insecticides.
Spades-Ames' Best Cast Steel ..... 25 and 150
Post Hole ..... 50
Sprinklers-Perfection Lawn Revolving ..... I 00
Rubber. Useful for window gardens, etc. ..... 10
Aphicide. Convenient and useful ..... 50
Syringes-Best Brass Greenhouse. Ten sizes ..... oo
Thermometers-Porcelain. Fahrenheit and Centigrade scales. ..... 50
Trowels-English Cast Steel. Four sizes ..... 60 to 100
American Cast Steel. ..... 50 to 60
Watering Pots-French Model. Iron-clad. ..... six quart, \$I.50; eight quart 200
Weeders-Excelsior ..... 25
Lang's. ..... 25

## FERTILIZERS.

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

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

## THORBURN'S COMPLETE MANURE.

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

Adapted for use on all crops, such as corn, tomatoes, potatoes, peas, beans and early vegetables, and is especially suited for grain crops and for seeding down to grass.
Price-In 167 lb . bags, per ton, $\$ 35$; single bags of $16 \% \mathrm{lbs} ., \$ 3.50$; per bag of 75 lbs ., $\$ 2$; 50 lbs., $\$ 1.50$; 25 lbs., $\$ 1$; 10 lbs., 50 cents.

## THORBURN'S POTATO MANURE.

Guaranteed to contain ammonia, $4^{1 / 2}$ to 5 per cent.; phosphoric acid, all soluble, 7 to 9 per cent.; actual potash, 9 to 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.
Price-In $16 \% \mathrm{lb}$. bags, per ton, $\$ 43$; single bags of $16 \% \mathrm{lbs} ., \$ 4$; per bag of ry lbs., \$2.50; 50 lbs., \$1.75.

## THORBURN'S LAWN FERTILIZER.

Guaranteed to contain ammonia, 5 to 6 per cent. ; phosphoric acid, all soluble, $5^{1 / 2}$ to 7 per cent.; actual potash, $71 / 2$ to $81 / 2$ per cent.; lime, sulphate of magnesia, soda, sulphuric acid, etc.

Specially prepared for lawns and meadows as a top dressing, imparting to grass a rich, green color and vigorous growth.
Price-In 167 lb . bags, per ton, $\$ 43$; single bags of $16 \% \mathrm{lbs} ., \$ 4$; per bag of 75 lbs. $\$ 2.50$; 50 lbs., $\$ 1 .{ }^{7} 75$; 25 lbs., 31 ; 10 lbs., 50 cents.
4 Quantity required per acre on soils not impoverished, about one-halt ton.


## Tree and Shrub Seeds.

## HOW TO GROW THEM.

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

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

## EVERGREEN TREE SEEDS.



| EVERGREEN TREE SEEDS-CONTINUED. Peroz, Perlb. |  |  |  |
| :---: | :---: | :---: | :---: |
| Juniperus oxycedrus | Sharp-leaved Cedar | \$0 15 | \$I co |
| " occidentalis | Western Cedar | 15 | 75 |
| Phœenecia | Phcenecian Juniper . . . . . . | 20 | 200 |
| prostrata | Prostrate Cedar | 10 | 50 |
| Utahensis | . Utah Juniper | 25 | 250 |
| Virginianus | Red Cedar | 10 | 60 |
| Libocebrus decurrens | California Cedar | 40 | 400 |
| Picea Ajanensis | .From Japan | 75 | 800 |
| " Alckokiana |  | 75 | 800 |
| amabilis | Lovely Silver Fir | 50 | 500 |
| grandis | - Great Silver Fir of Oregon | 40 | 400 |
| * magnifica | Superb Silver Fir | 60 | 600 |
| nobilis | . Noble Fir (from California) | 60 | 600 |
| * | * (from Oregon) | So | 900 |
| Pinus Australis | Yellow Pine | 40 | 400 |
| " Austriaca | Austrian Pine | Io | 75 |
| * Banksiana | Hudson Bay Scrub Pine | 100 | 1200 |
| * Canariensis | Canary Island Pine | 40 | 400 |
| Cembra | . Cembran Stone Pine | 10 | 50 |
| Cephalonica vera | Greek Silver Fir | 40 | 400 |
| " Coulteri | . Coulter's California Pine | 40 | 400 |
| contorta | Twisted Pine | 40 | 400 |
| excelsa | . Bhotan Pine | 75 | 700 |
| " insignis | . Oregon Pitch Pine | 30 | 300 |
| " Jeflreyi | Jeffrey's Pine | 40 | 450 |
| Lamberti | Sugar Pine. | 30 | 300 |
| Laricio | Corsican Pine | 25 | 250 |
| Llaveana | .Llav's Mexican Pine | 50 | 500 |
| maritima | . Seaside Pine | IO | 50 |
| monticol | Mountain Weymouth Pine of Cal | 60 | 600 |
| " monophylla | Pinon Pine. | 25 | 200 |
| muricata | . Bishop's Pine | 60 | 6 し0 |
| Pinea | . Stone Pine | 10 | 50 |
| " ponderosa (Benth | Heavy Pine | 40 | 4 co |
| resinosa | Red Pine | 60 | 600 |
| rigida | Pitch Pine | 35 | 350 |
| Subiniana | Sabine's Nut Pine | 25 | 250 |
| strobus | White Pine | 20 | I 50 |
| sylyestris | Scotch Pine | こ. | 125 |
| Torrevana | Torrey's Pine | 35 | 350 |
| tuberculata | . Tubercled Pine of California | 60 | 600 |
| Sequoia gigantea | . Big Tree of California. | 65 | 600 |
| sempervirens. | Cailifomia Red Wood. | 40 | 400 |
| Taxus baccata | . European Yew. | 25 | I 50 |
| brevifolia | Short-leaved California Yew | I 00 | 900 |
| Thuja aurea | Golden Arbor Vitæ. | 30 | 300 |
| articulata | Jointed " | 75 |  |
| occidentalis | America! | 30 | 250 |
| orientalis | Chinese | 15 | 100 |
| compacta | Compact | 25 | 200 |
| Siberica | Siberian |  | 400 |
| gigantea | Giant Oregon Arbor Vitæ | 60 | 600 |
| Tartarica | Tartarian Arbor Vitæ. |  | 300 |
| Torreya Californica | California Nutmeg | 25 | 200 |



## DECIDUOUS TREE AND SHRUB SEEDS.

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

Per oz. Per 1 l .
Acer campestre
Field Maple
\$0 15 \$0 75
" circinatum
Round-leaved Maple
$3 \supset 300$
" glabrum .................. Oregon Maple......................... $25 .{ }_{25}{ }_{20}$
" macrophyllum ............... Large-leaved Maple ..................... 25 I 50
is platanoides.................. Norway Maple ........................ ${ }^{15}$. 75
is Pennsylvanicum ............ Striped Maple........................... 25 . I 50
paimatum
japan Maple
$25 \quad 2$ =0
folymorphim

rubrum....................... Staritt Marle ............................... 25 . 25 us
saccharinum ................. Sugar Maple ............................. 15 . 50
var. nigrum..... Black Sugar Maple ...................... 25 . 200
"s spicata.........................Mountain Maple............................ I $_{5} 75$
\&sculus flava ..................... Sweet or Yellow Buckeye............... . 25
glabra . . . . . . . . . . . . . . . . Ohio Buckeye . . . . . . . . . . . . . . . . . . . . . . . . 25
Ailantus glandulosus ............ Tree of Heaven.......................... 25 . 50
Alnus communis ................ Common Alder. ......................... . . . . . I5 $_{5}$
incana . . . . . . . . . . . . . . . . . . . Smooth White Alder . . . . . . . . . . . . . . . . . 20
Oregona
Oregon Alder ............. . . . . . . . . . . . . 75
Juneberry ............................. . . . . . . 25


Andromeda racemosa . . . . . . . . . . . . Pepper Bush (pod:) .................. . . . . 25
calyculata............ Leather Leaf .. ................... . . . 30
Mariana............... Stagめูต Fush ......................... 25
Arbutus Menziesii ................... Madrono Tree .......................... . . . 25
Unedo.................. . . Strawberry Bush . . . . . . . . . . . . . . . . . . . . 25

Asimina triloba....................Papaw or Custard Apple ............... 15 . 75
Berberis aquifolium Californicum... Oregon Grape .......................... 75.800
nervosa .....................Nerve-leaved Barberry ................... 75 . 800
vulgaris.................. Common Barberry ...................... . . . . 15 I 00
" purpurea ............Purple-leaved Barberry ................ 25 . 200
Betula Americana alba ........... White American Birch ................ 25 I ${ }_{50}$
alba ..................... White European Birch .................. 15 . 50
lutea ...................... . Yellow Birch............................. . . . 25 . 200
nigra ....................... Black Birch ................................. 25 . 2 ur
papyracea................. Paper Birch ................................ 25 . 200
pendula .................. Weeping Birch .......................... 25 . 200
Betula populifolia................. Poplar-leaved Birch ..................... . . . . 25 . 2 00
Broussonetia papyrifera
Paper Mulberry ....................... . . 25
200


| Cytisus alpinus | Alpine Laburnum | $\begin{aligned} & \text { Per oz. } \\ & \$ \mathrm{O} 20 \end{aligned}$ | $\begin{aligned} & \text { Per lb. } \\ & \$ \mathrm{I} 50 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Laburnum | Laburnum | 20 | I 00 |
| Daphne Mezereum | Mezereum | 60 |  |
| Deutzia scabra | Rough-leaved Deutzia. | 40 |  |
| Dioscorea villosa | Wild Yam | 50 |  |
| Diospyros Lotu | European Persimmon. | 20 | 150 |
| Mexicana | Mexican | 25 | 200 |
| - Virginiana | Wild Persimmon | 20 | $1{ }^{\text {l }}$ |
| Elæagnus angustifolia | Oleaster | 25 | 200 |
| Eucalyptus globulus | Tasmanian Blue Gum | 50 | 5 оo |
| " siderophloia | Red Ironbark | 75 | 7 00 |
| " -Other distin | es from Australia | I 50 |  |
| Euonymus latifolia | Broad-leaved Burning Bush | 25 | $15^{\circ}$ |
| " Europæa | European " " | 25 | I 50 |
| Fagus Americana | American Beech | 10 | 60 |
| " sylvatica | European | IO | 50 |
| " purpurea | .Purple | 25 | I 50 |
| Frangula Purshiana | Oregon Thorn. | 40 | 400 |
| Fraxinus alba American | White American Ash. | 20 | 60 |
| acuminata | Yellow | 20 | I 00 |
| excelsior | European Ash | 20 | 50 |
| Ornus | Flowering | 20 | 75 |
| Oregona | Oregon | 25 | 150 |
| pubescens | Soft-leaved Ash | 25 | I 25 |
| quadrangulata | Blue Ash | 20 | 75 |
| sambucifolia | Black American Ash | 20 | 75 |
| viridis | Green " " | 20 | 75 |
| Fremontia Californica | California Shrub | 75 | 900 |
| Garrya elliptica. | Elliptical-leaved Garrya | I 00 |  |
| Gaultheria Shallon | Salal | 50 | 500 |
| Gaylussacia frondosa | Blue Dangle-berry | 30 | 300 |
| " resinosa | Black Huckleberry | 30 | 300 |
| Genista scoparia | Scotch Broom | Io | 50 |
| tinctoria | Green Broom | 20 | I 50 |
| juncea | Rush-leaved Broom | 20 | I 00 |
|  |  |  |  |
| Gleditschia Sinensis $\square$ Chinese Thorn ................. ........ 25 I 50 |  |  |  |
| triacanth | Honey Locust | Io | 50 |
| horrida | Horrid Thorn | 25 | I 50 |
|  | Kentucky Coffee Tree | I5 | 75 |
| Halesia tetraptera | Silver Bell | 25 | 250 |
|  | English or Hardy Ivy | 20 | I 00 |
| Hedera Helix........... <br> Hibiscus Syriacus fl. pl | Double Rose of Sharon | 20 | I 50 |
| Ilex verticillatus (See Prinos) |  |  |  |
| " aquifolium <br> " opaca | European Holly | 20 | 75 |
|  | American | 20 | 75 |
| Indigofera tinctoria. | . Indigo Tree | 15 | I 50 |
| Juglans ciner ". nigra | . Butternut. . Per qt., 15 c.; per |  |  |
|  | . Black Walnut. " 15 c.; |  |  |
|  | .From Japan | 10 | 50 |
| Kalmia angustif " latifolia | . Calico Bush (pods) | 25 |  |
|  | . Mountain Laurel. | 100 |  |
| Kœireuteria pan Larix Europæa | Chinese Bladder-nut |  |  |
|  | European Larch. |  |  |




## DECIDUOUS TREE AND SHRUB SEEDS-CONTINUED.

| Ulex Europæus | Furze | Per oz. | Per lb. $\$ 050$ |
| :---: | :---: | :---: | :---: |
| Ungnadia speciosa | . Texan Horse Chestnut | 20 | I 25 |
| Vaccinium corymbosum. . | Swamp Blueberry | 40 | 400 |
| " Pennsylvanicum | Dwarf Huckleberry | 40 | 400 |
| Viburnum acerifolium ... | . Maple-leaved Arrow-wood. | 25 | 200 |
| lentago. | Sweet Viburnum | 25 | 150 |
| nudum | Withe-Rod. | 40 | 400 |
| Opulus | Guelder Rose or Snowball | 20 | I 00 |
| prunifolium | Black Haw | 20 | 100 |
| pubescens | Downy Arrow-wood | 25 | 200 |
| tinus .... | Laurestinus ........ | 20 | I 00 |
| Virgilia lutea. | . See Cladrastis |  |  |
| Vitex agnus-castus | Chaste Tree | 20 | 100 |
| Wistaria frutescens | Shrubby Wistaria | 25 | 200 |
| " Sinensis. | . Chinese Wistaria | 50 | 500 |
| Zanthoxylum Americanum | Prickly Ash. | 25 | 250 |
| Zizyphus sativa............. | . Cultivated Jujube | 20 | 100 |

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

 Californica candicans. cinerea cordifolia indivisa (berries) Lincecumii riparia rotundifolia vulpinaPer oz.
$\$ 050$

- $\$ 400$
$30 \quad 300$
40400
35350
40400
25250
40400
$40 \quad 400$
40400
40400

Vitis Black Pearl . . . . . . . . . . . . $\$ 0$ Per 25. Per lb
Clinton................................ 20 I 50
Concord ...................... 20 I 50
Cynthiana .................... 30 . 300
Elvira....................... . . . 20 I 50
Herbemont . . . . . . . . . . . . . 25250
Ives' Seedling . . . . . . . . . . . . 20200
Marion. . . . . . . . . . . . . . . . . . 25250
Noah . . . ..................... 25250
Norton's Virginia.......... 20 I 50

## B00KS.

## All Books Sent Postpaid on Recelpt of Price.

American Cattle Doctor. By Geo. H. Dodd, M. D.............................. . . . \$1 50
American Farm Book. By L. F. Allen .................................................... 25.
American Gardener's Assistant. By Thos. Bridgeman.............................. . . 250
Asparagus Culture............................................................................... . . . . 50
Bee-Keeping. By L. C. Root . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . I 50
Broom Corn and Brooms.......................................................................... . . . . 50
Cottage Residences. By A. J. Downing . . . . . . . . . . . . . . . ............................... 3 . 30
Cotton Planter's Manual. By A. J. Turner............................................. . . . . 125
Flints' Grasses and Forage Plants........................................................... 200
Fruit Garden. By P. Barry......................................................................... . . 250
Grape Culturist. By And. S. Fuller ...................................................... . . . . . 50
Hedges and Evergreens. By J. A. Warder............................................ . . . . 150
Insects, How to Destroy .................................................................... . . . . 30
Mushroom Culture. By Wm. Earley. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 40
My Vineyard at Lakeview..................................................................... . 125
Peach Culture. By Hon. J. Alexander Fulton............................................... 1 . 50
Practical Forestry. By And. S. Fuller................................................... . . . 50
Practical Poultry Keeper. By Lewis Wright . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 200
Rose, Ellwanger on the..................................................................... . . . . I 50
Silos and Ensilage. By Prof. Geo. Thurber.............................................. 50
Small Fruit Culturist. By And. S. Fuller . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 150
Stewart's Sorghum and its Products..... ............................................... . I 50
Sweet Potato Culture. By James Fitz . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 60
The Sugar Beet. By Lewis S. Ware ...................................................... 350
Tobacco Culture : Full Practical Details. ............................................. 25
Truck Farming at the South. By Dr. A. Oemler...................................... I 50
Wheat Culture. By D. S. Curtiss ............................................................ . . . . 50
Window Gardening. By Henry T. Williams ........................................... I 50

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

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

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

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

HARDY BIENNIALS $(\mathbf{h B})$ and PERENNIALS $(\mathbf{h P})$.-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 Sepiember ; 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 spring, the covering must be carefully removed and the surface around them loosened, and when large enough, transplanted to the flower garden where they are to remain.

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 hot-bed will be sufficient protection ; but it is best to cover the glass with a mat or straw at night until danger of frost is past. In the day give all the air possible by partly or wholly removing the lights. After the end of May sow in the border, like Hardy Annuals.

HALF-HARDY BIENNIALS (hhB) and HALF-HARDY PERENNIALS (hhP) require the same treatment. Though plants and their bloom are greatly forwarded by sowing the seed 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 hot-bed, carefully protecting them from the cold, shading from the mid-day sun, and watering with a fine rose. The seed should be sown in very light, sandy compost, and the pots well drained by placing broken pots and bits of sods in the bottom. The finer seeds must not be covered more than an eighih of an inch deep, and the soil pressed down closely over them. Water frequently, particularly if the house or hot-bed be very warm. As soon as the plants are out of the seed leaf, transplant into shallow boxes or small pots, and when they have acquired sufficient strength transplant into the flower beds; not, however, before the middle of May.

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

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

There are many minute plants, from the finer seeds, killed by drenching with water while very young. One way to avoid this is to give the water by dipping a clothes-brush in water, shaking off the greater part of the water from the brush, and then (holding the brush over the seed-pan) drawing the hand over the bristles several times, which will cause the water to be thrown on the young plants almost like dew. Some of the vaporizers or 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.

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

Cinerarias. - Years ago the Cineraria was a popular plant among florists. Bedding plants crowded it aside, but it is now fast taking its proper place again among choice winter-blooming plants. It is, to be sure, a rather difficult plant to grow and bloom well, if its requirements are not understood. The mistake generally made is in growing it in a warm house instead of a cool one. The seed should be started in the greenhouse. For winter blooming, sow the seed in April and May, in shallow boxes in fine soil ; drop the seed in shallow drills, cover, and press the earth rather firmly with a piece of board or the bottom of a pot. Set the box where it will get the morning sun, but be free from drip ; water moderately and carefully. The treatment of the seedlings should be similar to that given to the Chinese Primrose. As soon as the plants are out of the seed leaf, transplant singly into small pots in a rich soil with some vegetable mould in it. Re-pot as often as the pots become moderately filled with roots, or sufficiently often to prevent the roots from becoming pot bound, and so avoid checking the growth. If specimen plants be wanted, the repotting should be continued till the plants are in pots from eight to ten inches in diameter. The last two pottings should be liberal ones, and drainage well provided for, as the plants will need copious waterings. When the flower stalks appear, manure water may be used once or twice a week. Aphis and red spider are the chief enemies to be guarded against; and this is best done by frequent syringing or sprinklings overhead. The plants will do best during the summer out of doors in some place where they will not get too much sun, and be free from the drip of trees. In the fall the plants should be placed in a cool greenhouse, where the temperature can be kept low and the air moist. The plants should be placed on a table by themselves, and the pots always kept far enough apart to prevent the leaves in one pot from touching those in the next. In the winter, when tixe plants are coming into bloom, it may be necessary to smoke the plants with tobacco occasionally to keep down the "green fly" or Aphis.

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

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

## EXPLANATION OF THE FLOWER SEED CATALOGUE.

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

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

The second column gives the botanical name, in Roman characters.
*designates ornamental-leaved plants.

- designates the repetition of the name above it as applied to the variety to which the dash is prefixed.
in vars. designates in varieties, or mixed colors.
fl. pl. designates flore pleno, or double-flowered.
The third column gives in figures the comparative time of flowering. As it is impossible, in our varied extent of climate, to state the exact month any plant may flower in, we have adopted the simple plan of classing the different varieties into early, intermediate, and late flowering sorts. Thus:

I designates early.

```
2 " intermediate.
3 late-flowering plants.
```

The fourth column gives the hardiness and duration:
A represents Annual, lasting but one year.
B " Biennial, lasting two years.
P " Perennial, lasting three or more years.
E " Evergreen.
.. designates in every case, repetition.
But as a large number of the Biennials and Perennials, if sown early, flower the first season, this distinguishing mark ( $\dagger$ ) is affixed to such.
h represents hardy-plants for open border.
hh " half-hardy-plants that require to be forwarded in pots or frames.
t " tender-requiring protection.
g " greenhouse plants-such as do best when kept under glass.
bu " bulbous plants-plants forming bulbs or bulbous roots.
S " shrubs.
The fifth column gives the color in full, except as abbreviated below :
ap. for apetalous... | bff, for buff........ | lav. for lavender... |scar. for scarlet.
blk. " black.......
br. " brown .....
tri." tricolor ..... sul." sulphur ....
The sixth column gives the comparative height of the plants in feet. Trai. signifies trailing; Cr.creeping.

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

## FLOWER SEEDS.


#### Abstract

Flower Seeds mailed promptly, with postage paid, on receipt of amount annexed.


5 See explanation of figures and signs on page 68.

|  | All Flower Seeds delivered free by mail. |  |  |  |  |  |  | General Observation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Abron | $\left\lvert\, \begin{array}{ll}  & 2 \\ 2 & 3 \\ 2 & 3 \\ 2 & 3 \\ 2 & 3 \end{array}\right.$ | $\begin{aligned} & \mathrm{hA} \\ & \mathrm{gS} \end{aligned}$ | $\begin{aligned} & \text { rose } \\ & \text { y. st. } \\ & \text { d. red } \\ & \text { crim. } \\ & \text { mixed } \end{aligned}$ | trai. | $\stackrel{\text { cts }}{5}$ | Beautiful annual trailer. |  |
| $\begin{aligned} & 2065 \\ & 2075 \\ & 2078 \\ & 2080 \\ & 2082 \end{aligned}$ | Abutilon Thompsonii fol. var atrosanguineum Darwinii grandiforum Mixed |  |  |  | $\cdots$ | 25 25 25 25 |  | Constant blooming plants with bright colored bellshaped flowers; valuable either for house or garden |
| $\begin{aligned} & 2085 \\ & 2087 \\ & 2090 \\ & 2104 \end{aligned}$ | Acacia dealbata Decaisneana melanoxylon Fine Mixed | I <br> I <br> I <br> I |  | yel. $\vdots$ mixed | 6 | 10 10 10 10 10 |  | Fine greenhouse shrubs, with graceful branches and fine racemes of yellow flowers, richly scented. |
| $\begin{aligned} & 2107 \\ & 2108 \end{aligned}$ | $\underset{\text { spin }}{\text { Acant }}$ | 3 | hP | whit | 3 | Io |  | ne large ornamental leaved plants with showy flowers |
| 2118 | Aconitum Napellus |  |  | blue | 4 | 5 |  | Monk's Hood. Pretty flowers ; very fine. |
|  | $\underset{\text { ver }}{\text { Adon }}$ |  | $\begin{aligned} & \mathrm{hA} \\ & \mathrm{hP} \end{aligned}$ | $\begin{aligned} & \text { scar. } \\ & \text { yel. } \end{aligned}$ | 11/2 | 5 |  | Pretty and hardy. Showy spring flower. |
| $\begin{aligned} & 2128 \\ & 2129 \\ & 2130 \\ & 2132 \\ & 2135 \\ & 2138 \end{aligned}$ | Aga |  | tP | blue |  | Io |  | African Lily. A beautiful tuberous-rooted plant. |
|  | Agerat |  |  | whit |  |  |  | Free flowering bedding |
|  | Lasseaux | ${ }^{2}$ |  | , |  |  |  | plants of low growth, con- |
|  | Mexicanum | 23 23 23 | hhA | blue white | 1/2 |  |  | trasting well with Gerani- ums, Perilla and Dwarf |
|  | -"Little Gem" | 23 23 |  |  |  | 5 |  | Amaranths. |
|  | Agrostemma |  |  |  |  |  |  | e Rose Cam |
| $\begin{aligned} & 2148 \text { A } \\ & 2149 \\ & 2150 \\ & 2153 \\ & 2155 \end{aligned}$ | Alonsoa grandiflora |  | thhB |  |  |  |  | ry showy in flower, and of |
|  | -alba | 13 |  |  |  |  |  |  |
|  | linifolia | 1 |  |  |  | 5 |  | in the house in cold weath- |
|  | myrtifolia | I 3 |  |  | 21/2 | 5 |  | er, as the plants are rather |
|  | Warscewi | ${ }^{1} 3$ |  |  | 2 | 5 |  | der. Sow in hot-bed. |
|  | Alth |  |  |  |  |  |  | Holly hock and Hibiscus. |
|  | Alstroem | 12 | gP |  | 3 | Iо |  | etty for cons |
| $\begin{aligned} & 2159 \\ & 2160 \\ & 2163 \\ & 2165 \\ & 2166 \end{aligned}$ | Alyssum |  | hA | white |  |  |  | Fine bedding plants. The |
|  | -compactum | I 3 |  |  |  |  |  | frst is the well-known |
|  | Wierzbeckii . . . |  |  | yel |  | 5 |  | Sweet Alyssum; saxatile |
|  | argenteum |  |  |  | 11/2 | 5 |  | is a fine perennial, w golden yellow flowers. |
| $\begin{aligned} & 2167 \\ & 2168 \\ & 21689 \\ & 2168 \\ & 2170 \\ & 2182 \\ & 2190 \\ & 2192 \\ & 2196 \\ & 2196 \\ & 2197 \\ & 2198 \\ & 2199 \end{aligned}$ | Amarantus Abyssinicus |  |  |  |  |  |  |  |
|  | *bicolor ruber <br> *cruentus (Prince's Feather) | 23 |  |  |  | 5 |  | Ornamental-leaved plants, |
|  | \%giganteus . . . . . . | 23 2 2 |  |  | 6 | 5 |  | invaluable for bedding; the foliage is crimson, varie- |
|  | \#enderi | ${ }_{2} 2$ | tA |  | 4 | ${ }^{\circ}$ |  | gated yelow, etc. The tri |
|  | *melancholicus | 23 2 2 2 |  |  | $21 / 2$ | 5 |  | gated yellow, etc. color varieties are among |
|  | salicio | 23 23 |  |  |  | 5 |  | the most valuable bedding |
|  | tricolor ( Joseph's | 23 |  |  | dif | 5 |  | plants, and are also fine when grown in pots. |
|  | Fme Mix |  |  | dk.pur |  |  |  |  |










DOUBLE CHINESE PINK.


CENTAUREA AMERICANA.


CENTAUREA CANDIDISSIMA.


EUPHORBIA VARIEGATA.


SIngle dahlia.


|  | All Flower Seeds delivered free by mail. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3018 | Eustoma exaltatum | 3 | gP | blue | 2 | cts. 10 | Handsome; from Texas. |
| 20 | Eutoca multiflora | 3 | hB | pink | 1 | 5 | ) Are good serviceable flower- |
| 22 | viscida | I 3 | hA | blue |  | 5 | \} ing plants for bedding; |
| 3026 | Wrangeliana | 13 |  |  |  | 5 | free blooming. |
| 3030 | Fenzlia dianthiflora | 12 |  | ros | 1/4 | 25 | etty for ribbon gardening. |
| 3033 | Feverfew, Blood-colored Flax. | 13 | $\dagger$ ¢P | d. r. | 2 | 10 | ine for ribbon gardening. ee Linum. |
|  | Forget-me-not- |  |  |  |  |  |  |
| 3046 3048 | Myosotis alpestris | 12 | †hhP | blue | trai. | 10 | 1 are beautiful. The My- |
| 3048 3049 | $\begin{aligned} & \text {-alba } \\ & \text {-eleganti } \end{aligned}$ | $\begin{array}{ll}1 & 2 \\ \text { I } & 2\end{array}$ |  | white mixed | 1/2 | $\begin{aligned} & \text { 10 } \\ & \text { 10 } \end{aligned}$ | osotis palustris is the true |
| 3050 | Azorica . | I 2 |  | d. b. |  | 10 | "Forget-me-not" of Eu- |
| 3054 | -cælestina | 12 |  | 1. |  | 25 |  |
| 3056 | dissitiflora | I |  | b |  | 10 | ering. |
| 3058 | palustris | 12 | $\dagger$ ¢P | b. \& w. | 3/4 | 10 |  |
| 3062 | sylvatica | 2 |  |  | I | 10 |  |
| 3065 | Foxglove (Digitalis), White | 2 |  | white | 2 | 5 |  |
| 3070 | Large-flowered | 12 |  | 1. y . | 11/2 | 5 |  |
| 3072 | Rose Purple | 1 2 <br> 1 2 <br>   |  | ur |  | 5 | The Foxgloves are showy for back-grounds and borders, |
| 3075 3078 | Purple | 12 |  | pur. | - | 5 | back-grounds and borders, and are beautiful when |
| 3080 | -Rose | 23 |  | rose | - . | 5 | planted among shrubs. |
| 3082 | -Mixed | 23 |  | mixed | 4 | 5 |  |
| 3087 | Mixed | 12 |  |  | div. | 5 |  |
| 3089 | Four O'Clocks, Hybrid | 23 | tA |  | 2 | 5 | irabilis.) Handsome, free |
| 3090 | longiflora alba . . . . | , |  | white |  | 5 | flowering, sweet-scented; |
| 3091 | Variegated-leav | 23 |  | ed |  | 5 | blossoms variegated, strip- |
| 3091 a | a Dwarf White | 23 |  | white | I | 5 | ed, and various colors. |
| 30 |  | 12 | hP |  |  | 25 | eautiful scarlet fruit. |
| 3095 | Fuchsia, single, in var. . . | 13 | gS | ixed | div. | 50 | Ladies' Ear Drop." Well known greenhouse plants. |
| 3096 | Gaillardia amblyodon | 3 | $\dagger$ hhP | fine $r$. | 2 | 5 | Showy and free bloomers. |
| 3097 | picta | , |  | yel. |  | 5 | They are good bedders, |
| 3098 | - Lorenziana Borealis | 23 23 | . | mixed |  | 5 | very beautiful, fine for |
| 3099 3102 | -Aurora Borealis -Salmon Red. | 23 2 2 |  | sc. \& y sal. |  | 5 | bouquets, and should be |
| 3104 | pulchella | 23 | hh |  |  | 10 |  |
| 3108 | Galega | 12 | hP | blue | 3 |  | Ornamental tall plants for |
| 3110 | -alba . . . . . . . . . | 12 |  | hite |  | 5 | \} borders. |
| 3112 | Gam | 1 | hh |  | 1 | 5 | Fine for beds. |
| 3114 | Gardenia Thunbergii? . . . | 1 | gS | whit | 2 | 25 | Flowers very fragrant. |
| 3116 | Gardoquia Betonicoides . . | 3 |  | pur | I $1 / 2$ | 10 | Oorthy of cultivation. |
| 3118 | aura Lindheimeriana | 12 | hhA |  | 3 | 5 | asil |
| 3120 | Gentiana acaulis | 1 | hP | d. b. | I/4 | 10 | ine showy hardy plants. |
| 3121 | campestr | 2 | ha | pur. | 1/2 | 10 | Should be in every collec- |
| 3124 | cruciata | 2 | hP | blue | I | 10 | tion for the beauty of the |
| 3125 3126 | Andrewsii | 3 |  |  |  | 10 | flowers. |
| 3126 | cri | 3 | h |  |  | 25 |  |
| 3129 | Geranium (Zonale), Scarlet | 3 | gP | scar. | 11/2 | 10 | aved from fine named |
| 3132 | Double Scarlet | 13 |  |  |  | 50 | ies; especially fine |
| 3138 | -sanguineum . |  | hP | pur | 1 | 50 | colors. See Pelargonium. |
| 3141 | Gesnera macrantha |  | gP |  | 1/2 | 50 | Beautiful greenhouse plants |
| 314 | Extra Mixed | 2 |  | mixed |  | 50 | with long-tubed flower |
|  | Geum Chiloense coccineum | 2 | hP | scar. | I $1 / 2$ | 5 | . |
| 3146 | -atrosanguineum fl. pl. |  |  |  |  | 10 | Fine for bouquets. |



3198 Grindelia squarrosa . . . . .
3199 inuloides
3200 Gutierrezia gymnospermoides
3206 Gypsophila elegans

| 3207 | -rosea ....... |
| :--- | :--- |
| 321 I | muralis...... |
| 3213 | paniculata . . . . . |
| 3218 | Hawkweed, Bearded |
| 3220 | Red...... |
| 3222 | White . . . . . . . |
| 3223 | Mixed . . . . . . |

3225 Helenium Douglasii
3230 Heliotropium Peruvianum
3235 Chieftain, dark
3242 Voltairianum
3244 in vars.
3248 Helleborus niger
Hesperis
3252 Hibiscus Africanus militaris
3260 Syriacus, double
3261 flavescens
3262 coccineus
3264 Moscheutos roseus
3265 Hollyhock, Double White . .
3266 Double Orange
3267 -Red
3268 -Rose
3272 Honesty (Lunaria annua)
3274 Humea elegans
3275 -albida

|  | hA | ue |  | cts. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 |  | white |  |  | Free-blooming Annuals, fine |
| 2 |  |  | 1/2 | 5 | for beds. Will bloom in |
| 2 |  |  |  | 5 | any situation, look well on |
| 2 | . |  | I | 5 | lawn in beds, are good for |
| 2 | . . | tri. |  | 5 | rockeries, and can be |
| 2 | - . | mixed |  | 5 | planted at any season. |
| 2 |  | se |  | 5 |  |
| 2 | gP | e | 1/2 | 10 | A very handsome plan |
| 3 |  | mixe |  | 50 | autiful greenhouse plants. |
| 3 |  |  | $\cdot$ | 50 | \} They grow well in a light |
| 3 |  |  |  | 50 | ich soil. |
| 3 | hA | p. r. | 1 | 5 |  |
| 3 |  | d. cr. | I $1 / 2$ | 10 | All are fine, profuse bloom- |
| 3 |  | w. \& c. |  | 5 | ing, hardy Annuals, the |
| 3 | $\cdots$ | white | - | 10 | colors being beautiful. Can |
| 3 | . | crim. | - | 5 | be grown in pots. G. Whit- |
| 3 |  |  |  | 5 | neyi, the largest flowered, |
| 3 |  | blush | IV | 5 | is of a crimson blush, |
| 3 |  | dr. ose | I1/2 | 5 | makes a fine pot plant, |
| 3 | . | car. | - | 10 | and is good for bedding. |
| $\begin{aligned} & 3 \\ & 3 \end{aligned}$ |  | w. spo. mixed |  | 5 | and is good for bedding. |
|  |  |  |  |  | See Pyrethrum. |
| 2 | hhA | yel. | 1/2 | 10 | or edgings, pots, or baskets. |
| 3 | gP |  | 2 | 25 |  |
| 3 3 2 | hB | d. yel | $\begin{aligned} & 1^{1 / 2} \\ & 2^{1 / 2} \end{aligned}$ | $25$ | Fine greenhouse plants, eas ily grown. From Mexico. |
| 2 | hP | yel. | I | 5 | r baskets ; yellow flowers. |
| 2 |  | white |  |  | ne for bouquets. Free |
| 2 |  | ro |  | 5 | bloomers for rockwork or |
| 2 | hA | pink | 1/2 | 5 | rubbery, and will grow |
| 2 | hP | white | 2 | 5 | soil. |
| 3 | hA | , |  |  |  |
| 3 |  | rose | . . | 5 | of free growth and varied |
| 3 |  | white |  | 5 | colors. |
|  |  |  |  |  | \{ Free flowering Composite, |
| 23 | hP |  |  | 5 | $\{$ with yellow flowers. |
| 13 | gP | p |  | 10 | Heliotrope. These well- |
| I 3 |  | d. pur. | . . | 10 | known favorites are highly |
| 3 |  |  |  | 10 | valued for their scented |
| 13 |  |  |  | 10 | flowers. Light rich soil. |
| 12 | hP. |  | I | 10 | \{ Christmas Rose. Desirable ; spring flowering. See Rocket. |
|  | hA | yl.\&b | 2 | 5 | Showy Annua |
| 2 | hP | rose |  | 10 | Distinct flowers. |
| 3 | hS | w. \& p . | 6 | 5 | The Rose of Sharon. |
| 23 | hP | straw | 3 | 10 | Western Marsh-Mallow. |
| 2 | tP |  | 4 | ı0 | From southern marshes. |
| 23 | hP |  | 3 | 10 | Large, showy flowers. |
| 3 | $\dagger \mathrm{hP}$ | white |  | Io | (Althcea rosea.) From |
| 23 |  | orange | 3 | 10 | named varieties, of all |
| 23 |  |  | . | 10 | shades of color. These |
| 23 |  | rose mixed | - 4 | 10 | plants have been much improved of late years. |
| 2 |  |  | 2 |  | Curious and pretty |
|  |  |  |  |  |  |
| $\begin{array}{ll}1 & \\ 1 \\ \text { I } & \\ \\ \end{array}$ | †h | rose white | 5 | $\begin{aligned} & 10 \\ & \text { 10 } \end{aligned}$ | kept in pots first season. |



DOUBLE HOILYHOCK,


GYPSOPHILA PANICULATA.


GAILLARDIA LORENZIANA




| All Flower Seeds delivered free by mail. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 5 |  |
| 3390 | Linaria bipartita alba | 23 | hP | white | $1 /$ | $5$ |  |
| 3390 3391 | - -splendida | 23 | hhA |  | $\begin{aligned} & 1 / 2 \\ & 3 / 2 \end{aligned}$ | $5$ | desirable for edgings, and |
| $3391$ | Maroccana Cymbalaria | 23 | $\dot{\mathrm{h}}{ }^{\circ}$ |  | $3 / 4$ | $5$ | very good for rockwork. |
|  | Linum fl |  | thhP |  |  | 10 |  |
| $3394 a$ | grandiflorum rubrum | 23 | A |  |  | 5 | er |
| $3394{ }^{\text {b }}$ | $b$ Kingii. . . | 23 | tP |  |  | 25 | make pretty pot |
| 3394 C | c Lewisii variegatum | 12 | thP |  | 3 | 5 | lants. Gruw in sandy soil. |
| 3395 | Lisian | 23 | gA | blue | I $1 / 2$ | 25 | Fine; like the Ge |
| 3395a | oasa aurantiaca | 23 | iha |  | 6 | 5 | and curiously |
| 3398 | tricolor | 23 | hA |  | 2 | 5 | rs. |
| 3400 | Lobelia cardinalis | 2 | hP | scarlet |  | 10 |  |
| 3406 | Erinus grandiflora superba | 13 | hhP | d. b | 1/2 | 10 |  |
| 3412 | -speciosa. | 13 |  |  |  | 10 |  |
| 3415 | -Paxtoniana | 13 |  | b. \& w. |  | 10 | bon borders. |
| $3415 a$ $3415 b$ | a --Crystal Palace | I 3 |  | blue |  | 10 | is fine for hanging baskets |
| $\begin{aligned} & 3415 \mathrm{~b} \\ & 3415 \mathrm{c} \end{aligned}$ | C -Mixed |  |  | ${ }_{\text {mixed }}^{\text {crim. }}$ |  | $\begin{aligned} & \text { 10 } \\ & \text { 10 } \end{aligned}$ | or vases. L. E. speciosa |
| 3416 | gracilis | I 3 | tA | blue | $\operatorname{tr}$ | ro | and its varieties are the |
| $3416 a$ | a -alba... | I 3 |  | white |  | 10 | finest eaging plants, and |
| 3420 | Lindleyana rosea | 13 |  | rose | 1 | 10 | Scarlet Geraniums. |
| 3422 | ramosa | 13 | thhP | blue |  | 10 |  |
| 3424 | sp | 13 | tP | scar. | 2 | 25 |  |
| 3428 | Lotus J | 1 | gA | d. | 2 | 5 | in |
| 3430 | tetrago | 2 | ha |  | 3/4 | 5 | Vinged Pea |
| 3431 | ve-Lies-Bleeding | 2 |  | crim. | 3 | 5 | \{ Graceful, showy flowers good for back-ground. |
| 3432 | Love-in-a-Mist | 12 |  | blue | 1 |  |  |
| 3435 | White Double | 12 |  | hite |  | 5 | (Nigella.) Curious and or- |
| 3436 | Blue Spanish | 12 |  |  |  | 5 | namental ; Fennel-leaved |
| 3438 | White Spanish |  |  | white |  | 5 | easily grown and hardy. |
| 3439 | Mixed Spanish | 2 |  | mixed |  | 5 |  |
| 3444 | Lupinus albus | 23 |  | white | 2 | 5 |  |
| 3446 | atroviolaceus | 23 | hP | v. \& | 2 | 5 | The Lupin family, annual or |
| 3450 | Cruikshankii . . | 23 |  | var. | 3 | 5 | perennial, are among the |
| 3452 | Dunnettii superbus | 23 |  |  |  | 5 | perst beautiful ornaments |
| 3454 | Hartwegii |  |  | b. \& pk. |  | 5 | of the garden. Some are |
| 3456 <br> 3458 | -albus | 23 |  | whit |  | 5 | of the cially charming, having |
| 3458 3460 | cœlestinus | 23 | hA | 1. |  | 5 | spikes of highly colored |
| 3460 3460 | hirsutus | 23 |  | blue | 2 | 5 | flowers, silvery foliage, |
| $3460 a$ 3463 | -ruber | 23 |  | rose |  | 5 | and good habit. They |
| 3463 3465 | hybridus insignis luteus | 23 |  | r. |  | 5 | will flourish in any soil, |
| 3465 3470 | luteus <br> mutabilis | 23 |  | el. |  | 5 | but a rich loam will pro- |
| 3472 | nanus . |  | hA | b. \& v. | $3 / 2$ | 5 | duce the finest plants and |
| 3473 | pilosus |  |  | \& | 3 | 5 | flowers. The dwarf species |
| 3479 | polyphyllus | 23 | hP |  | 3 | 5 | make the best bedding |
| 3483 | pubescens. | 23 | thB | violet |  | 5 | plants. The flowers are |
| 3484 | subcarnosus | 23 | hP | white | 2 | 5 | ea-shaped and the plants |
| 3489 | sulphureus | 23 | hA | sul. |  | 5 | ree flowering, meriting |
| 3493 | tricolor elegans | 23 | hP | o. \& ro. | 3 | 5 | extensive cultivation. |
| 3498 | Mixed | 23 | hA |  |  | 5 |  |
| 3500 | Lychnis Chalcedonica |  | hP |  | 2 |  | Showy plants for borders, |
| 3505 | -alba | 12 |  | whi |  |  | being free bloomers. |
| 3506 | -Mixed |  |  | mix |  |  | They are finely colored, |
| 3507 | fulgens | 1 | tP |  | I | 10 | nd should be in every |
| 3509 | Haageana hybrida | 1 | hP | mixed |  | 10 | garden. |
| 3513 | Madia | 2 | hA |  |  | $5$ | Handsome flowers; should be in a shady position. |
| 3517 | Malope grandiflora | 23 |  |  |  |  |  |
| 3520 | - ${ }^{\text {alba. }}$ | 23 |  | white |  | 5 | pretty ; sow early. |
| 3522 | Mixed |  |  | mixed |  | 5 |  |
| 524 | Malva miniata | 23 | gP | S | 4 |  | Beautif |




MARIGOLD, "El DORADO." (See page 83.)

nemophila maculata. (See page 85.)


PANSY, LORD BEACONSFIELD. (See page 85.)


PAPAVER UMBROSUM. (POPPY.) (See page 87.)





All Flower Seeds delivered free by mail.


| $\begin{aligned} & 4117 \\ & 4118 \\ & 4120 \\ & 4127 \\ & 4130 \end{aligned}$ | Portulaca, Carnation Striped <br> -Double Salmon <br> -White <br> -Purple <br> -Mixed | $\begin{array}{ll}2 & 3 \\ 2 & 3 \\ 2 & 3 \\ 2 & 3 \\ 2 & 3\end{array}$ | tA | car. st sal. white pur. | 1/2 | $\begin{aligned} & \text { cts. } \\ & 25 \\ & 25 \\ & 25 \\ & 25 \\ & 10 \end{aligned}$ | Observation continued. <br> nate till hot weather sets in, and should therefore be sown late. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Potentilla atrosanguinea | $\begin{array}{ll}1 & 3 \\ \text { I } \\ \\ \end{array}$ | hP | ed | 1 $1 / 2$ | 10 | Showy and hardy border plants. |
| 4140 | mula | 2 |  | red | I | 10 |  |
| 4143 | aponi | 2 |  |  |  | 10 |  |
| 4145 | English Yellow Primrose | 2 |  |  |  | 10 |  |
| 4147 | Parryi | 2 |  | cr.pur. | 1/2-I | 25 |  |
|  | imula Sinensis fimbriata rubra | 3 | gP | fr. red | $3 / 4$ | 25 |  |
| 4157 4158 | - Bright Red | 3 3 |  | d |  | 25 25 | Chinese Primroses (Pri- |
| 59 | globosa, finest mixed | 3 |  | mixed |  | 25 | la Sinensis) are fine for |
| 4161 | -punctata atropurpurea |  |  | pur.sp. |  | 25 | nter and spring bloom |
| 4169 | -filicifolia alba. | 3 |  | white |  | 25 | ; they are free flower- |
| 4170 | -Mixed | 3 |  | mixed |  | 25 | and especially valua- |
| 4171 | rosea | 3 |  | rose |  | 25 | for cut-flowers or for |
| 4174 | -globosa rubra | 3 |  | red |  | 50 | use and window cul- |
| 4176 | - -alba | 3 |  | white |  | 50 | e. The seeds are saved |
| 4183 | -splendens | 3 |  | im |  | 25 | he finest colors and |
| 4187 | -Mixed | 3 |  | mixed |  | 25 | largest flowers. |
| 4190 | - plena rub | 3 |  | red |  | 75 |  |
| 4193 | - -alba | 3 |  | white |  | 75 |  |
| 4195 | lena, | 3 |  | mixed |  | 75 |  |
| 03 | imrose, Even'g (CEnothera) bistorta | 2 | hP |  | 2 | 5 | Enotheras are fine, free lowering plants, best for |
| 4205 | Drummo | I | ttP |  |  | 5 | ckyrounds or shrubbery |
| 4207 | Large-fi | 2 | hP |  | 3 | 5 | borders; EE. acaulis has |
| 4210 | Lamar | 2 |  |  | $11 / 2$ | 5 | large, shining white flow- |
| 4220 | Rose | 13 |  | rose | I | 5 | ers, quite transparent. |
| 4222 | raxacifolia alba or acaulis | 23 |  | white |  | 5 | Drummondii is of a |
| 4227 | traptera | 23 | hA |  |  | 5 | ch sulphur color, and |
| 4230 |  | 23 |  |  | div | 5 | se flowering |
| 4233 | rethrum atrosanguineum | 2 | hP |  | I | 10 | e last two. known as Gold- |
| 4235 | Tchihatchewii | 13 |  | white |  | 10 | Feather, are fine for |
| 4237 | Parthenium aureum | 23 |  | yel. | 1/2 | 10 | dgings; No. 4237 makes |
| $4237 a$ | " | 23 |  |  |  | 10 | a moss-like tu |
| $\begin{aligned} & 4239 \\ & 4252 \end{aligned}$ | Rese alb | $\begin{aligned} & 23 \\ & 23 \end{aligned}$ |  |  |  | $\begin{aligned} & 5 \\ & 5 \end{aligned}$ | Varieties oi Mignon very curious. |
| 4254 |  | I | hP |  | 3 | 10 | namental |
| 4258 |  | 1 | hS |  | 10 | 25 | Grand evergreen shrub |
| 4270 | Ricinus Borboniensis arbore | 2 | hha | vio |  |  |  |
| 42700 | Africanus | 2 |  |  | 8 |  | The Castor Oil Beans are |
| 4275 | Gibsoni . | 2 |  | 隹 | 5 |  | free growing, tender an- |
| 4276 | macrophyllus | 2 |  | pur. | 6 | 5 | nuals; very ornamental, |
| 4277 4278 | Cambodgensis | 2 |  |  |  | 5 | and quite tropical in ap- |
| 4278 4280 | cœruleus | 2 |  | ue | $6$ | $5$ | pearance, when planted |
| $\begin{aligned} & 4280 \\ & 4288 \end{aligned}$ | macrocarpa | 2 |  | d. pur. | 5 | 5 | singly on lawns; also |
| $\begin{aligned} & 4288 \\ & 4289 \end{aligned}$ | sanguineus <br> purpureus (species from the | 2 |  |  |  | 5 | ch used for centers of |
|  | Philippines). | 2 |  |  |  |  |  |
| $4289 a$ | d | 2 |  |  | to 8 | 5 |  |
| 4290 | Rivina humilis | 3 | g $P$ | white | 2 | 25 | rnamental in fruit. For greenhouses. |
| 4294 | lteri | 23 |  |  |  | 10 | om California ; fine flow- |
| 4295 | Rocket, | 23 | tnP |  |  |  | ers, resembling a Poppy. ree blooming and sweet. |
| 4300 | White | 23 |  |  |  |  | scented. |
| 4325 | Rose Ca | 2 |  |  |  |  | (Lychnis.) Free blooming |
| 4327 | White | 2 |  | white |  |  | and pretty. |

## All Flower Seeds delivered free by mail.

General Observations.

| 4330 Rose of Heaven (Viscaria) |  |
| :--- | :--- |
| 4333 | White |
| 4336 | elegans picta |
| 4340 | Dark-eyed |
| 4343 | oculata cœrulea |
| 4345 | flos Jovis (Jove's Flower) |

$\begin{array}{ll}2 & 3 \\ 2 & 3 \\ 2 & 3 \\ 2 & 3 \\ 2 & 3 \\ & 2 \\ & \\ & \\ & \\ & \end{array}$
4350 Rudbeckia amplexicaulis . 4351 maxima .
4355 Fuellia ciliosa
4356 Salpiglossis azurea
4360 coccinea
4366 nana
4307 in vars.
4370 Salvia argentea
4380 patens
4387 Romeriana
4390 splendens
4395 Greggii
4397 Sanvitalia procumbens fl. pl.
4400 Saponaria Calabrica
4403 -alba
4410 ocymoides
4414 Saxifraga Aizoon
4415 Huettiana.
4417 Scabiosa candidissima
4420 Mixed
4422 Dwarf Double
零 4425 Schizanthus Grahami. 4427 pinnatus
4430 porrigens papilionaceus
4433 retusus
4436 -alba.
4443 Schizopetalon Walkeri
4444 Scutellaria canescens
4446 Scyphanthus elegans
4450 Sedum cœruleum
4453 Maximowiczii
4454 Mixed
Senecio elegans
4455 Sensitive Plant
4460 Silene Armeria (Catch-Fly)
446I pendula
4462 Mixed.
4463 ruberrima
4467 Eastern
4470 Silphium integrifolium
4475 Smilax (Myrsiphyllum asparagoides)

4480 Snapdragon, Car. and White
$4483 \quad$ Crimson and White
4485 Striped
4488 Scarlet and White . . . .
4490 Scarlet

|  | hA | rose |  | cts. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3 |  | white |  | 5 | (Viscaria.) Profuse flower- |
| 3 |  | sc. \& w. | I $1 / 2$ | 5 | ing. Fine for beds. They |
| 3 |  | r. \& p. | 3/4 | 5 | are easily grown and can |
| 3 | hP | blue red | I ${ }^{2} / 2$ | 5 | be made very useful. |
|  |  |  |  |  | See Hibiscus Syriacus. |
| 2 |  | yel. |  | 5 | ) Showy large yellow flowers, with brown cone; for back- |
| 3 |  | y.b.ce. | 6 | 10 | \} with brown cone; for back- |
| 3 |  | ue | trai. | 25 | Showy, with long flow |
| 3 | hhA | blue | I | 10 | These annuals have very |
| 3 |  | scar. |  | 10 | showy, large flowers, |
| 3 |  | mixed | 1/2 | 5 | mottled, veined, and self- |
| 3 |  |  | 1 | 5 | colored; fine for beds. |
|  | thP | white |  |  | ge plants are well known |
| 2 | ttP | blue | 3 | 25 | their brilliant colors, |
| 2 | hP | crim. | 1 | 10 | bedding. They are |
| 3 | †hhP | scar. | ${ }^{2}$ | 10 | easily grown, free flower- |
| 23 | tP | d. red | I to 3 | 25 | ing, and showy. |
| 3 | hA | yel. | 1/2 | 5 | Pretty Composite for beds. |
| 23 |  | red | I | 5 | Pretty dwarf bedding plants. |
| 3 |  | white |  | 5 | \} Should be cultivated for |
| 2 | hP | red | 1/2 | 5 | their beauty and long blooming. |
| 2 |  | whit | 1 | 25 | ) Fine for rock work, on |
| 2 | hA |  | 1/2 | 25 | ) which they are beautiful. |
| 3 |  |  | $21 / 2$ | 5 |  |
| 23 |  | mixed |  | 5 | \} The Mourning Bride is a |
| 23 |  |  | I $1 / 2$ | 5 |  |
| 23 | hhA | s. | 2 |  | gant and very free bloom- |
| 3 |  | p. v. | I $1 / 2$ | 5 | g annuals. Large, beau- |
| 23 |  | bk.eyd |  | 5 | ul flowers of many col- |
| 23 |  | r. \& o. | 2 | 5 | ors, blotched, dark purple, |
| 3 |  |  |  | 5 | nd spotted with orange. |
| 23 |  | mixed | div. | 5 | Fine for bedding. |
| 12 | hP |  | 3/4 | 10 | ur |
| 13 |  | bilue | 2 to 3 | 25 | Useful |
| 3 | tA |  | 2 | 10 | ine green |
| 2 | hA | blue | 1/4 | 10 | The Stone Crop is curious |
| 2 | hP | yel. |  | 10 | and showy. Plant in sandy |
| 2 |  | mixe | $3 / 4$ | 0 | ( soil ; fine for carpet beds. |
|  |  |  |  |  | ee Jacobca |
| 23 | tA | pink |  | 5 | (Mimosa.) Pretty |
| 12 | hA | r. \& w. |  |  |  |
| I 2 |  | re |  | 5 | (Catch-Fly.) Bright colored, free flowering annuals |
| 12 |  | mix |  | 5 | free flowering annuals; showy and pretty. Plant |
| I. 2 |  | rose |  | 5 | showy and pretty. Plant |
| I | hP |  | 2 | 5 |  |
| 12 |  | yel. | 4 to 6 | 25 | ree flowering and showy. |
| 23 | gP | white | 6 | 10 | For table and house decoration. Fine for florists. |
| 2 | $\dagger \mathrm{hP}$ | c. \& w. | 11/2 | 10 |  |
| 2 |  | cr.\& w. |  | 10 | The Antirrhinum is one of |
| 2 |  | strıp. |  | 5 | the finest border peren- |
| 2 |  | s. \& w. |  | 5 | nials. The plants are free |
|  |  | sc |  |  |  |



All Flower Seeds delivered free
by mail.

## VINES AND CLIMBERS.

|  | Aristolochia Sipho Asparagus verticillatus |
| :---: | :---: |
| 4732 | Calampelis scabra |
| 4734 | Canary Bird Flower |
| 4736 | Cardiospermum Halicaca |
| 4754 | Clematis Virginiana |
| 4756 | Flammula |
| 4758 | graveolens |
| 4764 | Clitoria ternatea |
| 4766 | -alba |
| 4768 | Cobrea scandens |
| 4769 | -allsa |
| 4774 | Convolvulus aureus superbus |
| 4776 | major (Morning Glory) |
| 4780 | Mauritanicus |
| 4782 | Dolichos Lablab |
| 4784 | -alba. |
| 4786 | in varieties |
|  | Hedysarum coronarium |
| 4792 | -album |
| 4795 | Humulus Japonicus |
| 4798 | Ipomøea coccinea |
| 4800 | -lutea |
| 4807 | Hursfallix |
| 4808 | hederacea grandiflora |
| 4810 | -marmorata |
| 4812 | Nil |
| 4814 | limbata |
| 4816 | Mexicana grandiflora |
| 4817 | --hybrida |
| 4820 | bona nox (Good Night) |
| 4824 | Learii |
| 4826 | rubra cœerulea |
| 4828 | - -alba |
| 4834 | Madame Anne |
| 4835 | quamoclit |
| 4837 | -alba |
| $4840 a$ | a hederæfolia coccinea |
| 4842 | in varieties |
|  | Kennedya Comptoniana |
| 54 | Marryattæ |
| 4856 | rubicu |


| 2 | hP | \|yel. br.| | 30 |
| :---: | :---: | :---: | :---: |
| 1 |  | white | 12 |
| 3 | thP | orange | 6 |
| 23 | hhA | yel. | 10 |
| 23 |  | w.\& gr. |  |
| -2 3 | hP | white | 15 |
| 12 |  |  | $\cdots$ |
| 2 |  | yel. | 30-40 |
| 12 | hB | blue | 15 |
| 12 | . | white |  |
| 23 | tte | pur. | 20 |
| 23 |  | white |  |
| 23 | hha | gold | 5 |
| 23 | hA | mixed | 10 |
| 23 | hP | blue | trai. |
| 23 | gP | pur. | 10 |
| 23 |  | white | . |
| 23 |  | mixed |  |
| 3 | thB | red | 3 |
| 3 | . | white |  |
| 3 | tA | gr. | 15-20 |
| 23 | hA | scar. | 10 |
| 23 |  | yel. |  |
| 23 | IP | rose | ${ }^{15}$ |
| 23 | tA | blue |  |
| 23 |  | mar. |  |
| 23 |  | pur. |  |
| 23 |  | v. \& w. | 5 |
| 3 |  | white | 15 |
| 23 |  |  |  |
| 23 |  |  |  |
| 23 | g P | v. b. |  |
| 23 |  | b. \& r. | 8 |
| 23 |  | white |  |
| 23 | hA | sc.\& w. | 10 |
| 23 | tA | scar. |  |
| 23 | . | white |  |
| 23 |  | scar. |  |
| 23 |  | mixed |  |
| 12 | gP | blue | 12 |
| 13 | - | scar. | 4 |
| 12 |  | d. red |  |

The "Dutchman's Pipe." Most beautiful foliage.
Fine for trellis.
One of the best old favorites.
Balloon Vine ; pretty fruit.
) Very fine ornamental plants for a piazza. Should have support where planted.
Beautiful greenhouse and conservatory climbers.
Kapid growing; fine.
Pretty, and fine for baskets, except the Morning Glory, which is good for screens.
(Hyacinth Bean.) Rapid growing and free flowering; good for screens.
French (Bush) Honey suckle.
Climbing Hop; pretty.
These are very beautiful free blomming plants, and useful for covering verandas, trellis work, etc. No. 4816 is the so-called "Moon Flower." No. 4817 is very similar to the Moon Flower, but blooms thirty to forty-five days earlier. Nos. 4807, 4824, 4826 and 4828 are also beautiful greenhouse climbers.
I. quamoclit is the wellknown Cypress Vine; very beautiful bright flowers, and is quite popular.
These are fine profuse bloomers for the greenhouse. Do best in sandy loam.



SMALL GOURDS.


SNAKE CUCUMBER.

ORNAMENTAL GOURDS FRUIT-BEARING PLANTS.
All Flower Seeds delivered free
by mail.


HELICHRYSUM MONSTROSUM.


GOMPHRENA GLOBOSA.

## SEEDS OF EVERLASTINGS,

For the Formation of Wreaths and Winter Bouquets.



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




## PALM SEEDS.

| Areca Baueri . ............ ı | eeds, $\$ 0 \begin{array}{r}\text { Pkt. } \\ \\ \text { 25 }\end{array}$ |
| :---: | :---: |
| lutescens . . . . . . . . . . 10 | " 25 |
| Sapida . . . . . . . . . . . . 12 | 25 |
| Caryota urens . . . . . . . . . . 10 | 10 |
| Chamærops Canariensis... 10 | 25 |
| " excelsa...... 25 | " 10 |
| humilis.... . . . 25 | 10 |
| Cocos Australis ............ 10 | 25 |
| " Bonetti ............. 8 | 25 |
| " campestris.......... 8 | 25 |
| " plumosa............ 8 | 25 |
| flexuosa . . . . . . . . . . io | 25 |
| Corypha Australis.......... 10 | 10 |

Kentia Belmoreana Pkt. ..... 8 seeds, \$0 25
" Forsteriana ..... 25" Canterburyana
50
". More
Latania Borbonica................ ..... 75
Latania Borbonica ..... Iо
Musa Ensete (Abyssinian
Banana) ... ioo seeds, \$2. . io ..... 25
Pandanus utilis ..... 25
Phœenix Canariensis........ Io ..... Io
" dactylifera ..... Io
tenuis ..... 25
Seaforthia elegans ..... 10
Washingtonia filifera .....I5 ..... IO

## IMPROVED FRENCH AND GERMAN ASTERS.

In this latitude, Asters should be sown from the middle of March to the first part of May, on a spent hot-bed, or in pots or shallow


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

There is such a great variety of form and coloring in this beautiful class of plants that it is not remarkable that they continue in high favor. In no other class of Annuals can such rich colors and varied fine forms be obtained.

In ordering these collections, please give simply the numbers of the particular Assortments desired.

## COLLECTIONS OF BEAUTIFUL ASTERS,




DWARF GERMAN STOCKS.


WAIL-FI.OW'ER-I.EAVED STOCRS.

## GERMAN TEN WEEKS AND OTHER STOCKS.

Sow at the same time and treat in precisely the same manner as given on preceding page for Asters, except that they may be transplanted several times with advantage in the earlier stages of growth, the shift tending to give them a more compact and dwarf habit.

In ordering, please give the numbers of the particular Assortments desired.
COLLECTIONS OF STOCKS, CONTAINING-


## ASSORTMENTS OF FLOWER SEEDS.

 COLLECTIONS OF


## COLLECTIONS OF FLOIVER SEEDS.

Free by Mail at Prices Affixed.

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


20 Choice Hardy Biennials and Perennials I oo
Hot All Strictly Our Own Selection.
LIST OF FLOWER SEEDS BY WEIGHT.
Per oz.Ageratum Mexicanum, "Dwarf BlueGem " . . . . . . . . . . . . . . . \$0 40
Alyssum maritimum (Sweet) ..... 40
Asters, Mixed China ..... 50
Truffaut's Fine Mixed ..... 100
" Large Double White ..... 00
Balsams, Mixed Double Paris ..... 40
Double Pure White ..... I CO
Double Crimson ..... O
Balloon Vine ..... 30
Canary Bird Flower ..... 50
Candytuft, Best White . Per lb., 75 c. ..... 20
Giant White "Charmer" ..... 75
Dunnett's Crimson ..... 35
Mixed ..... 20
Canna, Fine Mixed ..... 25
Carnation Pink, Common ..... 75
Ex. Fine Double Mixed ..... 300
Centaurea andidissima ..... 350
gymnocarpa ..... 75
Cineraria maritima (Dusty Miller) ..... 40
Cobæa scandens ..... 100
Cockscomb, Dwarf Crimson ..... 75
Mixed ..... 50
Convolvulus major (Morning Glory) Mixed Per lb., 45 cts. ..... 10
Convolvulus minor, Dwarf " 75 cts . ..... 25
Cosmos hybridus, Mixed ..... 75
Cypress Vine, Red or White ..... 40
Four O'Clocks, Finest Mix., Per lb., 60 c. ..... I5
Dwarf White ..... 25
Gaillardia picta Lorenziana ..... 60
Globe Amaranths ..... 30
Hollyhocks, Splendid Double. Mixed ..... 75
Double Orange ..... I 00
" Rose ..... 00
" White ..... , 0
Larkspur, Dwarf Rocket ..... 25
Lobelia Erinus speciosa ..... I 00
Lupinus, Mixed ..... 25
Marigold, " Meteor" ..... 35
African Mixed ..... 35
El Dorado ..... 50
French Mixed ..... 40
Mignonette, Sweet . . . Per lb., 75 cts. . \$0 15
"Crimson Queen" ..... 40
"Golden Queen ' ..... 50
Miles' Spiral ..... 40
French Machet ..... 80
Nasturtium, Tom Thumb "Empress of India" ..... 40
Tom Thumb Scarlet ..... 20
Tom Thumb Mixed ..... 20
Nemophila, Mixed ..... 25
Pansy, Mixed . . . . . from 75 cents to 500
Peas, Sweet, Mixed . . Per lb., 50 cts. ..... 15
Pentstemon, American, Mixed ..... 150
Petunia, Fine Mixed, spotted and striped ..... 00
Phlox Drummondii, Fine Mixed ..... 50
-Large-Flowering, Mixed ..... 75
-Dwarf Crimson Bouquet ..... oo
" Blood Red ..... oo
، White Snowball ..... oo
-grandiflora splendens ..... 00
Pink, mixed Double China ..... 40
New Mourning ..... 25
Poppy, mixed Carnation . Per lb., 75 c. . ..... 25
Portulaca, Splendid Mixture ..... 40
Best Mixed Double ..... 500
Pyrethrum " Golden Feather " ..... oo
Ricinus sanguineus (Red-stalked Castor Bean) . . . . . . . Per lb., 60 cts. ..... 15
Salvia splendens, rich scarlet . ..... 200
Smilax, fine climber for pots ..... 00
Snapdragon, Mixed Tall ..... 35
Mixed Dwarf ..... 35
Stock, English Ten Weeks, Mixed ..... 75
Finest German Ten Weeks ..... oo
Finest Winter, or Brompton ..... 400
Sunflower, double Californian ..... 25
Sweet William, fine Auricula flowered ..... 30
Thunbergia, fine Mixed ..... 40
Verbena, Hybrid Mixed ..... $\$ \mathrm{t}$ to 3 oo
Wallflower ..... 35
Zinnia, Finest Double, mixed . Per lb.,\$4 ..... 40
Double Dwarf Crimson ..... 75
" Mixed Pompon ..... oo
" " Robusta ..... oo

## LIST OF FLOWERS SUITABLE FOR BOUQUETS.

Abronia umbellata ..... Per pkt. .....
Ageratum Mexicanum ..... 5
-album ..... 5
Alyssum maritimum ..... 5
Amarantus tricolor ..... 5
Ammobium alatum ..... 5
Aquilegia chrysantha ..... 10
Aster chrysanthemiflora ..... 10
-alba ..... Io
Balsams, Camellia-flowered ..... IO
Cacalia coccinea ..... 5
Callirrhoë pedata ..... 5
Centranthus macrosiphon ..... 5
-dwarf ..... 5
Chrysanthemum inodorum ..... 10
Collinsia bicolor ..... 5
verna ..... 5
Cuphea strigulosa ..... IO
miniata. ..... Io
purpurea ..... IO
Dianthus Chinensis ..... 5
Digitalis, assorted ..... 5
Gaillardia picta "Aurora Borealis". ..... 5
Gilia tricolor5
Globe Amaranthus, assorted ..... 5
Godetia, assorted. ..... 5
Gypsophila paniculata ..... Per pkt.
acutifolia ..... 5
Heliophila araboides ..... Io
Heliotropium grandiflorum "Chieftain" io

Iberis odorata ..... 5
umbellata ..... 5
amara ..... 5
Kaulfussia amelloides ..... 5
Leptosiphon (Gilia) densiflorus ..... 5
Lobelia Erinus ..... 5
gracilis ..... 5
Malope grandiflora ..... 5
Mimulus moschatus ..... Io
Phlox Drummondii grandiflora ..... Io
Reseda odorata " Machet" (Mignonette) ioSilene Schafta5
Smilax (Myrsiphyllum asparagoides) ..... Io
Spraguea umbellata ..... 25
Statice, assorted ..... 5
Stevia serrata ..... IO
Stocks, Ten Weeks ..... IO
Verbena, assorted ..... 5
Viola tricolor (finest) ..... 25
Viscaria oculata. ..... 5
Zinnia, all the double varieties ..... 5

## LIST OF FLONERS SUITABLE FOR HANGING BASKETS.

Ageratum Mexicanum nanum ...... \$0 o5
Alyssum maritimum...................... 5
Aubrietia deltoidea . . . . . . . . . . . . . . . . . . 1 ו
Calandrinia umbellata .................. . . 10
Cosmidium Burridgeanum.............. 5
Cerastium tomentosum . . . . . . . . . . . . . . . 25
Clintonia (Downingia) pulchella ...... Io
Convolvulus Mauritanicus............. . . . aureus superbus ....... Io
Dwarf Nasturtiums.
Eschscholtzia tenuifolia. 55
Eucharidium grandiflorum ..... 5
Fenzlia dianthiflora ..... 25
Gilia nivalis ..... 5
rosea splendens ..... 5
Heliophila araboides ..... IO
Iberis amara ..... 5
rosea ..... 5
Limnanthes Douglasii ..... 5
Lobelia Erinus and varieties Per pkt. ..... \$0 05
gracilis and varieties ..... 5
Lupinus nanus ..... 5
subcarnosus ..... 5
Mignonette ..... 5
Mimulus moschatus ..... Io
Nemophila insignis ..... 5
maculata ..... 5
Pansy, varieties (finest) ..... 25
Petunia plena and spotted ..... 25
Portulaca (Double) ..... IO
Sanvitalia procumbens (Double) ..... 5
Saponaria Calabrica ..... 5
Sedum cœruleum ..... IO
Silene pendula ruberrima ..... 5
Spraguea umbellata ..... 25
Verbena (finest) ..... IO
Virginian Stock ..... 5

## INDEX

| Agrimony ........... Page | Flower Seeds, New and Rare Page | Orach . . . . . . . . . . . . . 30 |
| :---: | :---: | :---: |
| Agrimony . . . . . . . . . . . . 40 Angelica 40 | Flowers for Bouquets Rare . ${ }^{\text {F-5 }}$ | Ornamental Gourds . . . . . 93 |
| Anise . . . . . . . . . 40 | " " Hanging Baskets . 104 | Grass Seeds . . 97-99 |
| Arnica . . . . . . . . . . . 40 | Forks . . . . . . . . . . . . . 53 | Osage Orange . . . . . . . . 41 |
| Artichoke . . . . . . . . . 1 | Fox Glove . . . . . . . . . . 40 | Pæony . . . . . . . . . . 40 |
| Asparagus ${ }_{\text {Roots }}^{\text {a }}$. . . . . . 10 | $\underset{\text { Fruit }}{\text { ¢ }}$ Picker . . . . . . . . . 53 | Palm Seeds . . . . . . . . . Parsley |
| Knives . . . . . . 53 | Fumitory . . . . . . . . . . 40 | Parsnip . . . . . . |
| Asperula . . . . . . . 48 | Furze . . . . . . . . . . . 49 | Pearl Millet . . . . . . . . |
| Assortm'ts of Flower Seeds 101-102 | Fumigator . . . . . . . 53 | Peas . . . . . 31-32 |
| " Vegetable Seeds . 42 | Garden Force Pumps . . . . . 55 | " Canada Field . . . . . 49 |
| Asters, French and German . 100 | Lines . . . . . . . 53 | Pepper |
| Atomizers . . . . . . . . . . . 55 | Reels . . . . . . . 53 | Pennyroyal . . . . . . . . . . 40 |
| Balm . . . . . . . . . . . . 40 | " Requisites . . . . . 53 | Plant Sticks . . . . . . . . 54 |
| Barbe de Capucin . . . . . . 19 | Gombo . . . . . . . . . . . 28 | Poppy . . . . . . . . . . 50 |
| Barley . . . . . . . . . . . . . 47 | Grape Seeds . . . . . . . . . 64 | Potatoes . . . . . . . . . . . 33 |
| Besil . . . . . . . . . . . . 40 | Grafting Wax . . . . . . . . . 53 | Potato Manure . . . . . . . 54 |
| Beans, Dwart or Snap . . . . . is | Grass Border Shears . . . . . 53 | Pruning Shears . . . . . . 51, 55 |
| " English Dwarf . . . . . II | " Edging Knives . . . . . 53 | " Chisels . . . . . . 54 |
| Horse and Soja . . . . 49 | Hooks and Sickles . . . 53 | Pumpkin |
| Pole or Running . . . . 12 | Seeds . . . . . . . . 43-46 | Pyrethrum |
| Beet . . . . . 13 | Ground Bone . . . . . . . . 53 | Radish . . . . . . . . . . 34 |
| Mangel Wurzel or Sugar . 14 | Guano . . . . . . . . . . . . 53 | Raffia . . . . . . . . . . . . . 54 |
| Beliadouna . . . . . . . . . . . 40 | Guizotia . . . . . . . . . . 49 | Rakes . . . . . . . . . 52, 54 |
| Bellows . . . . . . . . . . 53 | Hedge Seeds . . . . . . . . . 41 | Ramie . . . . . . . . . . . . 50 |
| Bene . . . . . . . . . . 40 | Shears . . . . . . . 53 | Reana . . . . . . . . . . 50 |
| Bill and Brush Hooks . . . . 53 | Hellebore . . . . . . . . . 40 | Requisites . . . . . . . . 51-53 |
| Bird Seeds, etc. . . . . . . . . . 46 | Hemlock . . . . . . . . . . 40 | Rhubarb . . . . . . . . 35 |
| Books . . . . . . . . . . . . . 64 | Henbane . . . . . . . . . . . 40 | Roots . . . . . . . . 46 |
| Boneset . . . . . . . . . . . . . 40 | Herb Seeds . . . . . . . . . . . 39 | Rosemary . . . . . . . . . . . 40 |
| Borage . . . . . . . . . . . . . 15 | Hop Seed . . . . . . . . . . 49 | Roquette . . . . . . . . . . 35 |
| Borecole . . . . . . . . . . . . 24 | Horticultural Implements . 52-55 | Rue . . . . . . . . . . . 40 |
| Broc coli . . . . . . . . . . . 14 | Hoes . . . . . . . . . 53 | Rye . . . . . . . . . . . 47 |
| Broom Corn . . . . . . . . 49 | Horse-Radish Roots . . . . 46 | Saffron |
| Scotch . . . . . . . 49 | Hose Menders . . . . . . . 53 | Sage . . . . . . . . . . . . . . 40 |
| Brussels Sprouts . . . . . . . . 15 | Hyacinth Glasses . . . . . . . . 53 | Salsify . . . . . . . . . . . 36 |
| Buckwheat . . . . . . . . . . . 47 | Horehound . . . . . . . . . 40 | Savory |
| Buffalo Grass . . . . . . . . 9 | Hyssop . . . . . . . . . . . 40 | Saws |
| Burnet . . . . . . . . . . . . . 14 | Ice Plant . . . . . . . . . . . 23 | Scissors . . . . . . . . 55 |
| Cabbage . . . . . 16 | Implements . . . . . . . . 52-55 | Scolymus |
| " Turnip-Rooted . . . 23 | Indigo Seed . . . . . . . . 49 | Scorzonera |
| Canes, Bamboo . . . . . 53 | Insecticides . . . . . . . . 53,54 | Scurvy Grass . |
| Caper Tree Seed . . . . . . . 49 | Iris Pabularia . . . . . . . . . 49 | Scythes. |
| Caraway . . . . . . . . . . . 40 | Jajan Clover : . . . . . . . . 50 | Scythe Stones |
| Cardoon . . . . . . . . . . . 17 | Jerusalem Artichoke . . . . . . 46 | Seeds by Mail or Express |
| Carrot . . . . . . . . . . . . . 15 | Johnson Grass . . . . . . . . . 50 | Seradella |
| Caterpillars . . . . . . . . 49 | Jute . . . . . . . . . . . . . 49 | Shears |
| Catnip . . . . . . . . . . . . 40 | Kaffir Corn . . . . . . . . . . 50 | Shovels |
| Cauliflower . . . . . . . . . . 17 | Kale . . . . . . . . . . . . . 24 | Shrub Seeds . . . . . . . . $5 t^{-6}$ |
| Celeriac . . . . . . . . . . . 18 | Kıives . . . . . . . . . 54 | Skirret |
| Celery . . . . . . . . . . . . . 18 | Kohlrabi . . . . . . . . . . . . 23 | Snails |
| Cereals . . . . . . . . . . . 47 | Labels . . . . . . . . . . . 54 | Soap, Whale Oil |
| Chard, Swiss . . . . . . . . 36 | Lavender . . . . . . . . . . . . 40 | Sorghum |
| Chervil . . . . . . . . . . . 17 | Lawn Fertilizer . . . . . . . . 55 | Sorrel |
| Chicory . . . . . . . 19, 49 | ، Grass Seed . . . . . . . . 45 | Spades |
| Chive Plants . . . . . . . . . . 46 | Mowers . . . . . . . 54 | Spinach |
| Clovers . . . . . . . . . . . . 46 | Mower Guar 's . . . . . 54 | Sprinklers |
| Collards . . . . . . . . . . 19 | Rakes . . . . . . . . . 54 | Sprouts. |
| Collections of Flower Seeds . 103 | Leek . . . . . . . . . . . . . . 24 | Spurry |
| Coriander . . . . . . . . . 40 | Lentils . . . . . . . . . 49 | Squash |
| Corn, Field Varieties . . . . . 47 | Lettuce . . . . . . . . . . . 25 | Stachys Tuberifera . . 9,46 |
| " Sweet or Sugar . . . . . 20 | Lesperera . . . . . . . . . . 50 | Stocks, German Ten Weeks . Ict |
| Corn Salad or Fetticus . . . . . 19 | Liquorice . . . . . . . . . . . . 49 | Sunflower . . . . . . . . 46, 51 |
| Cotton . . . . . . . . . . . . . 49 | Lithospermum . . . . . . . . . 40 | Swiss Chard |
| Cow Peas . . . . . . . . . . . 49 | Lovage . . . . . . . . . . . . 40 | Syringes |
| Cress | Lucerne . . . . . . . . . . . 46 | Tarragon Plants . . . . . . 46 |
| Cucumber . . . . . . . . . . . 21 | Lupins . . . . . . . . . . . . 49 | Tansy |
| Dandelion . . . . . 22 | Madia Sativa . . . . . . . . . . 50 | Teasels |
| Deciduous Tree and Shrub Seeds 59 | Madder . . . . . . . . . . . . 50 | Thermometers . . . . . . 55 |
| Dibbles . . . . . . . . . . . . 53 | Mangel Wurzel . . . . . . . . . 14 | Thyme . . . . . . . . . . . 40 |
| Dill . . . . . . . . . . . . 40 | Manures . . . . . . . . . 53, 55 | Tobacco Seeds . . . . . . . 51 |
| Directions for Flower Seed | Marigold, Pot . . . . . . . . 40 | Tomato Seeds |
| Culture . . 65-67 | Marjoram, Pot . . . . . . . . 40 | Tree and Shrub Seeds . . 56-64 |
| for making Hot-bed. 3 | Marshmallow . . . . . . . . 40 | Trowels . . . . . . . 51, 55 |
| Lawns . 45 | Martynia . . . . . . . . . 25 | Turnips . . . . . 39 |
| " for Veg'ble Culture . 2 | Mats . . . . . . . . 54 | Turnip-Rooted Celery . . . . 18 |
| Elecampane . . . . . . . 40 | Melon, Musk . . . . . . . 26 | Vetches . . . . . . . . 51 |
| Economical Plant Seeds . . . 49 | Water . . . . . . . . 27 | Vegetable Plants . . . . . . 46 |
| Egg Plant . . . . . . . . . . 23 | Millet . . . . . . . . . 46 | Seeds . . . 10-40 |
| Endive . . . . . . . . . . 22 | Miscellaneous Seeds . . . . . 49 | " " New . . 6-9 |
| Esculent Roots and Plants . . 46 | Mole Trap . . . . . . . . . 54 | Vegetables used for Pickles . . 41 |
| Esparto Grass . . . . . . . 49 | Mushronmı Spawn . . . . . . 28 | Salad . . 41 |
| Everlastings . . . . . . . . 96 | Mustard . . . . . . . . . . 27 | Vegetable Ovster. |
| Evergreen Tree Seeds . . 57-59 | Nasturtium . . . . . . . . . . 28 | Vines and Climbers . . . . . 93-94 |
| Express Rates . . . 2d page cover | New and Rare Flower Seeds. 4-5 | Warranties |
| Fertilizers . . . . . . . 53, 55 | New and Selected Strains in | Watering Pots . . . . . 52, 55 |
| Fennel . . . . . . . . . . . . 40 | Vegetables . . . . . . . . 6-9 | Weeders . . . . . . . . . . 55 |
| Fenugreek . . . . . . . . . . 49 | Oats . . . . . . . . . . . . 47 | Wheat |
| Fetticus . . . . . . . . . . . . 19 | Okra . . . . . . . . . . . . . 28 | Wheat, Rural New Yorker, . . 48 |
| Flax Seed . . . . . . . . . 49 | Onion . . . . . . . . . 29 | Wild Rice . . . . . . . . . . 51 |
| Floralis, Thorburn's . . . 53 | Onion Sets Tops, etc. . . . . 29 | Witloof . . . . . . . . . 19 |
| Flower Seeds, General List . 65-99 | Onobrychis . . . . . . . . 50 | Worms . . . . . . . . . . . . 51 |
| by Weight . . . 103 | Opium | Wormwood . . . . . . . . . . 41 |



> Rural New-Yorker No. 2 Potato
> IS THE LATEST SEEDLING of Great value.

## THORBURN'S Gilt-Edge Cauliflower

Is the Surest and Finest of all Sorts.


THORBURN'S

RED DUTCH CABBAGE
Exim Paly Maxater Pas


[^0]:    836 Green Curled Winter. Best
    for late crop . . \$0 $20 \$ 050 \$ 150$
    White Curled. For
    early use . . . . $20 \quad 60 \quad 200$
    844 Green Moss Curled.
    Small, clear green leaves, mossy and crisp
    $20 \quad 60 \quad 200$
    846 Broad-Leaved Es carolle. A distinct variety
    $20 \quad 60 \quad 200$

