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# 10 <br> UPPLEMENT. 

Since we are generally recognized as the most extensive seed dealers in the United States, it is rare that a new variety is developed which is not brought to our notice before being offered to the general public.

We always test such samples and carefully compare them with older sorts, finding both pleasure and profit in any which are really valuable. Usually, however, they prove the same as strains we are already offering, or inferior to them. The originators have deemed them improved because not familiar with the best stocks of standard sorts.

We never offer as "new " a sort which we do not consider distinct and in some way superior to those in general use, accordingly our yearly list of nero kinds is not so extended as if we were less particular.

With the foregoing in mind, we call especial attention to the following varieties as either new (and therefore distinct and superior), or fine strains of standard sorts which are of exceptional merit and worthy of trial in every garden.

## BEANS-DWARF.

See pages 9-11.


## CHALLENGE DWARF BLACK WAX, Extra Early.

We have had considerable quantities of this stock in our hands for some years, but have not offered it before, because we wished to first satisfy ourselves that it was a distinct and decided improvement and could be depended upon to show its superiority every season. We now offer it with the assurance that it is the earliest wax podded bean; it is wonderfully productive; it is unexcelled in quality, and that the vines are extremely hardy and vigorous.

We do not ask you to simply try this in a small way, but urge you to use it for a considerable portion of your crop, for we are certain that it will be to your advantage to do so.

Per packet, 10c.; pint, 25c.; quart, 40c.; 4 quarts, $\$ 1.50$; bushel, $\$ 7.50$.
If by mail or express prepaid, 10 cents per pint, 15 cents per quart, must be added for charges.

## D. M. Ferry $\&$ @o's Golden Wax.

As we were the original introducers of this variety, we have always taken especial pains with it, and have demonstrated by extensive and repeated trials that the stock we offer is the best in existence, and not to be compared with that usually sold.

Per packet, 10c. ; pint, 20c.; quart, 30c.; 4 quarts, $\$ 1.00$; bushel, $\$ 6.00$.
If by mail or express prepaid, 10 cents per pint, 15 cents per quart, must be added for charges.

## D. M. FERRY \& CO'S DETROIT WAX.

That this introduction of ours has great merit is shown by the number of seedsmen who now offer it, often under other names, such as "Golden Queen Wax," "Improved Rust Proof Wax," etc. It is rust proof; it is a queen among wax beans, but its only proper name is D. M. Ferry \& Co's Detroit Wax. It is the best wax podded bean for shipping long distances. You can be sure of getting pure and true stock by ordering of us.

Per packet, 10c.; pint, 25c.; quart, 40c.; 4 quarts, $\$ 1.50$; bushel, $\$ 7.50$.
If by mail or express prepaid, 10 cents per pint, 15 cents per quart, must be added for charges.


The best late wax podded bean, not only for market but for private gardens. Its long, cylindrical, waxy yellow pods are tender, crisp and of the best quality when in condition to use for snaps, while as a green shelleu oean the variety has no superior. For those who wish to plant but one variety, this is the best.

Per packet, 10c.; pint, 30c.; quart, 45c.; 4 quarts, $\$ 1.50$; bushel, $\$ 9.00$.
If by mail or express prepaid, 10 cents per pint, 15 cents per quart, must be added for charges.

## EXTRA EARLY REFUGEE.

The earliest green podded bean, with all the good qualities of the old Refugee, and is to-day the most popular bean among New York market gardeners. The most profitable bean.

If by mail or express prepaid, 10 cents per pint, 15 cents per quart, must be added for charges.


## BEANS-POLE.

See pages 11-12.

## Red Speckled Cut Short, or Corn Hill.

We have a large and exceptionally good stock of this enormously productive corn hill bean. It is unequaled for planting among corn, particularly in the Middle States.

Per packet, 10c. : pint, 25c.; quart, 40c.; 4 quarts, $\$ 1.50$; bushel, $\$ 8.00$.
If by mail or express prepaid, 10 cents per pint, 15 cents per quart, must be added for charges.

## KENTUCKY WLONDER.

The largest and most fleshy podded pole bean, unequaled in productiveness and unsurpassed in quality, it has become exceedingly popular, especially in the Middle and Southern States. The best green podded pole bean.

Per packet, 10 c. ; pint, 30 c .; quart, 45 c .; 4 quarts, $\$ 1.50$ : bushel, $\$ 9.00$.
If by mail or express prepaid, 10 cents per pint, 15 cents per quart, must be added for charges.

## EARLY GOLDEN CLUSTER WAX.

We have tried the scores of wax podded pole beans that have been offered and consider this the handsomest and best.
Although this season has been an exceedingly unfavorable one, we have no apology to offer for our beans; they will be found to be of the same bright sample, high vitality and unequaled quality that has characterized our stock for years.

Per packet, $10 \mathrm{c} . ;$ pint, 30 c .; quart, $45 \mathrm{c} . ; 4$ quarts, $\$ 1.50$; bushel, $\$ 9.00$.
If by mail or express prepaid, 10 cents per pint, 15 cents per quart, must be added for charges.

D. M. Ferry \& Co's

See pages 13-15.

## EDMAND'S EARLY BLOOD TURNIP.

By careful selection we have given this splendid beet of American origin the small top and uni form color so noticeable in the European varieties, and now offer it as the best early table beet.

Per packet, $5 \mathrm{c} . ;$ oz., 10c.; 2 oz., 15c.; 1/4 lb., 20c.; $1 \mathrm{lb} ., 60 \mathrm{c}$.

## D. M. FERRY \& CO'S NEW HALF LONC BLOOD.

We are sure that as fast as this becomes known it will supersede all other kinds for fall and winter table use. It is incomparably the best late table beet.

Per packet, $5 \mathrm{c} . ;$ oz., 10c.; 2 oz., 15c.; $1 / 4 \mathrm{lb} ., 25 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.00$.

## Yellow Leviathan Mangel Wurzel.

The hardiness of the plant, the immense size of the roots and the fine quality of the flesh, make this the best cattle beet. It cannot fail to give satisfaction.

Per packet, $5 \mathrm{c} . ;$ oz., $10 \mathrm{c} . ; 2 \mathrm{oz} ., 15 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 20 \mathrm{c} . ; 1 \mathrm{lb} ., 60 \mathrm{c}$.

# $\rightarrow$ CABBAGE. 

See pages 15-17.

## EARLY JERSEY WAKEFIELD.

While we have been testing and seeking to improve the many new kinds of cabbage, we have, by no means, neglected this standard American sort, and our efforts have been repaid in a stock which we believe to be the very best extra early hardy cabbage in the world. The most profitable for the market gardener and most desirable for the amateur. Try our Early Jersey Wakefield.

Per packet, 5c.; oz., 30c.; 2 oz., 55 c .; 1/4 lb., $\$ 1.00 ; \mathrm{lb} ., \$ 3.00$.

New Half Long Blood.
EARLY DWLARF FLAT DUTGH.
The earliest large headed cabbage, and the most uniform stock of anything in the market. You may make sure of a large crop of superior quality, coming in at a time when it can be most profitably disposed of, by using our seed.


## Mammoth Rock Red.

A certain header, uniformily of a deep, rich red color, as large as Late Flat Dutch.
Per packet, 10c.; oz., $\$ 1.00 ; 2$ oz., $\$ 1.50$; 1/4 lb., $\$ 2.50 ; 1 \mathrm{lb} ., \$ 10.00$.

## Marblehead Mammoth Drumhead.

If you want the largest cabbage grown in your town or brought to your market, use this sort. Our stock is a great improvement on that usually offered, in that the plants are more certain to head, more uniform in character and the heads are larger. Try it. Per packet, $5 \mathrm{c} . ;$ oz., $25 \mathrm{c} . ; 2 \mathrm{oz} ., 40 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 75 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 250$.


# CARROT. <br> See pages 17-18. 

## CHANTENAY.

By far the most uniform in size, shape and color of any of the garden sorts, and so vigorous and productive as to be equally valuable for field culture. We consider this variety to be unequaled for either farm or garden, and recommend it for general use as the best.

Per packet, $5 \mathrm{c} . ;$ oz., 10c.; $2 \mathrm{oz} ., 15 \mathrm{c}$. ; 1/4 lb., 25c.; lb., 90 c .

## DANVERS.

The deepest colored, the largest yielder, and deservedly the most popular field sort of orange carrot. Our stock is true and unequaled.

Per packet, $5 \mathrm{c} . ;$ oz., 10c.; $2 \mathrm{oz} ., 15 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 25 \mathrm{c} . ; 1 \mathrm{lb} ., 75 \mathrm{c}$.

## @ELERY. <br> See pages 19-20.

## GOLDEN YELLOW LARGE SOLID.

We consider this variety unequaled as an early sort. It is as self-blanching as any, yet neither it nor any other kind can reach perfection without earthing up, or some artificial method of blanching. Unlike some sorts, we lose nothing in quality by the gain in beauty from the rich yellow color of the tip leaves. A great deal of spurious stock has been sold, but when the seed is true and pure, the result cannot fail to give satisfaction.

Per packet, 5c.; oz., 40c.; 2 oz., 75c.; $1 / 4 \mathrm{lb} ., \$ 1.25 ; \mathrm{lb} ., \$ 4.00$.

## D. I. Ferry \& Co's Improved Short White.

The extremely large, short, thick roots of this variety make it easier to harvest one thousand bushels of Short White than any other sort. If you want the largest yield at the smallest outlay of labor, plant the Short White.

Per packet, 5c.; oz., 10c.; 2 oz., 15c.; 1/4 lb., 25 c. lb., \$1.00.


## $\mathbf{W} Z H I T E P L U T N E$.

- Gardeners like this variety on account of its beauty, but have found it difficult to secure pure stock. We hare some which can be relied upon as the True White Plume. While not equal in quality to the Golden Yellow Large Solid, this is perhaps even more beautiful. Its clear white central leaves are very attractive.

Per packet, $5 \mathrm{c} . ;$ oz., 30c.; $2 \mathrm{oz} ., 55 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., \$ 1.00 ; \mathrm{lb} ., \$ 3.00$.


Golden Yellow Labgl Solid.

## GIANT PASCAL.

The thick, fleshy stalks, their beautiful color andjunequaled flavor, cannot fail to make this one of the most popuular late sorts. If you have not tried it do not fail to do so this season. Per packet, 10c.; oz., 60c.; 2oz., $\$ 1.00 ; 1 / 4 \mathrm{lb} ., \$ 1.75 ; \mathrm{lb} ., \$ 6.00$.



Parisian Prolific Pickling.

CORN. ©
See pages 21-23.

## CORY.

Our stock of this, the earliest medium sized sweet corn, is so much of an improvement on that ordinarily offered that we would be justified in giving it a new name. The best extra early sweet corn

Per packet, $10 \mathrm{c} . ;$ pint, $15 \mathrm{c} . ;$ qt, $25 \mathrm{c} . ; 4$ qts., $75 \mathrm{c} . ;$ bushel, $\$ 4.00$.
If by mail or express prepaid, $10 c$. per pint, 15c. per quart, must be added for charges.

## EARLY SOUTHERN SWEET.

The result of a cross between the Giant Cuzco of Mexico and the Minnesota. It is fit for use about as early as the Minnesota, and continues in condition longer than any other kind. This makes it the most desirable variety for those who plant but one. It will do well in the South, where other sorts of Sweet Corn fail.

Per packet, 10c.; pint, 15c.; quart, 25c.; , 4 quarts, 75c.; bushel, $\$ 4.00$.

If by mail or express prepaid, 10c. per pint, 15c. per quart, must be added for charges.

## CUCUMBER. <br> See pages 23-25.

PARISIAN PROLIFIC PICKLING.
A variety producing in profusion, fruits which, when from two to four inches long are not more than one-third to one-half inches in diameter, and are exceedingly crisp and tender. Unequaled for a family supply of pickles.

Per packet, $10 \mathrm{c} . ;$ oz., $25 \mathrm{c} . ; 2 \mathrm{oz} ., 40 \mathrm{c} .$, 立 $/ 4 \mathrm{lb} ., 75 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 2.50$.

## — LETTUCE.

## TILTON'S $\quad$ KLHITE STHR.

A white seeded lettuce destined to become a universal favorite for forcing or planting out doors, on account of its enormously large, loose heads, bright color, crispness and long keeping qualities. It is distinct from Black Seeded Simpson, and we think an improvement on that sort. It is an enormous yielder, and remains a very long time in condition for use, both before and after cutting. If you want your foreing bed to produce the largest possible amount of high flavored Lettuce, plant it to Tilton's White Star. Our stock is very limited.

Per packet, 10 c .; oz., $30 \mathrm{c} . ; 2 \mathrm{oz} ., 55 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., \$ 1.00 ; 1 \mathrm{lb} ., \$ 3.00$.


The thickest leaved and most solid heading, finest flavored Lettuce we offer. No one who can appreciate quality in their vegetables should fail to plant some of our Deacon Lettuce.

Per packet, $5 \mathrm{c} . ; 1 \mathrm{oz} ., 15 \mathrm{c} . ; 2 \mathrm{oz} ., 25 \mathrm{c} . ; 1 / 4 \mathrm{lb}$. , 40c.; $1 \mathrm{lb} ., \$ 1.50$

## HANSON.

We offer an improved strain of this, the largest heading Lettuce in the list, and one which can be depended upon to produce uniformly large, solid heads. Per packet, 5c.; oz., 15c.; 2 oz., 25c.; 1/4 lb., 40c.; lb., \$1.25.


Grand Rapids.

## GRAND RAPIDS.

The most compact grower and best shipper of any of the clustering forcing lettuces, and it is the best sort togrow in green-houses or hot-beds for forcing.

Per packet, $10 \mathrm{c} . ; 1 \mathrm{oz} ., 25 \mathrm{c} . ; 2 \mathrm{oz} ., 40 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 75 \mathrm{c} . ; \mathrm{lb} ., \$ 2.25$.

## EARLY JLHITE SELF~FOLDING GOS.

The Cos Lettuces only need to be known to become as popular here as in Europe. They have not been much grown in America heretofore because of the labor of blanching, but in this new sort we have a Cos Lettuce which does not need tying up. It forms a large, solid head like that of an Early York Cabbage. The head is nicely self-blanched, yellowish white in color, and very crisp, tender and of superior flavor.

Per packet, 10c.; oz., $25 \mathrm{c} . ; 2 \mathrm{oz} ., 40 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 75 \mathrm{c} . ; 1 \mathrm{~b} ., \$ 2.50$.


## ©SAGE TMTUSK TMEL®N.

The largest melon grown in Michigan, and one who has tried extensively nearly every other sort declares this to be the finest flavored Musk Melon we hare. Our seed is grown from carefully selected stock and can be relied upon as pure and true. Per packet, $5 \mathrm{c} . ;$ oz., 10c.; 2 oz., 15c.; $1 / 4 \mathrm{lb} ., 25 \mathrm{c} . ; 1 \mathrm{~b} ., \$ 1.00$.

## WATER MELON. <br> ROUND LIGHT ICING.

This fine melon is very beautiful to look at and very delicious to eat. In no variety is beautyand quality so well combined as in this. The stock wé offer is absolutely pure and true.

Per packet, 5c.; oz., ${ }_{3} 10 \mathrm{c} . ; 2 \mathrm{oz} ., 15 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 25 \mathrm{c} . ; 1 \mathrm{lb} ., 75 \mathrm{c}$.

## D. M. FERRY \& CO'S PEERLESS.

If you want the true Peerless, the sort which is acknowledged to be the best for near market. get headquarters seed. We hare giren a great deal of care to selecting and developing this and know ours to be the best strain of this unequaled variety.

Per packet, $5 \mathrm{c} . ;$ oz., $10 \mathrm{c} . ; 2 \mathrm{oz} ., 15 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 25 \mathrm{c} . ; 1 \mathrm{~b} ., 80 \mathrm{c}$.


## GOLDEN MUSTARD.



A most marked improvement over the old sorts. The immense plants have a brilliant golden yellow color, which they retain to a remarkable degree after cooking. For greens or salad this is incomparably superior to any other mustard. Per packet, 10c.; 1 oz., 15c.; 2 oz., 25c.; 1/41b., 40c.; $1 \mathrm{lb} ., \$ 1.50$.

## PERS.

## TMCLEAN'S ADVANCER.

Acknowledged to be the best of its season. This old variety has not been so universally planted as its merits warrant, because of the difficulty of getting a supply of pure stock. We have an abundance of the best stock of this variety ever offered, and we know that it will please you whether you grow for market or for your own table.

Per packet, 10c. ; pint, 15c.; quart, 25c.; 4 quarts, 75 c . ; bushel, $\$ 4.50$.
If by mail or express prepaid, 10 cents per pint, 15 cents per quart, must be added for charges.

## YORKSHIRE HERO.

This variety will please those who value a rich, fine flavor, as well as sweetness and tenderness. Many competent judges pronounce it the best sort we offer. Although a very old sort, it is not surpassed by any of the much lauded new kinds.

Per packet, 10 c. ; pint, 15 c. ; quart, $25 \mathrm{c} . ; 4$ qts., $75 \mathrm{c} . ;$ bu., $\$ 4.25$.
If by mail or express prepaid, 10 cents per $p t ., 15$ cents per $q t$., must be added for charges.


## STRATAGEM.

This is the largest podded of the semi-dwarf varieties. The vines are so stout that it can be grown without bushing, and giving, as it does, such a heavy crop of immense, well filled pods, it has become very popular. The green peas are of the largest size, tender, quite sweet and well flavored, and retain their color well when cooked. No gardener who wishes to keep up with the market should fail to use this sort for a considerable portion of his crop.

Per packet, $10 \mathrm{c} . ;$ pint, 20 c .; quart, $30 \mathrm{c} . ; 4$ quarts, $\$ 1.00$; bushel, $\$ 6.00$.
If by mail or express prepaid, 10 cents per pint, 15 cents per quart, must be added for charges.

## PUMPKIN.

See page 37 .

## SMLEET CHEESE, OR KENTUCKY FIELD.

Although this has not the deep, rich red color of the Large Yellow, it will produce a crop when the other is a complete failure, and is fully as good for pies. We offer an exceptionally pure and true stock.

Per packet, $5 \mathrm{c} . ; \mathrm{oz}_{\mathrm{c}}, 10 \mathrm{c} . ; 2 \mathrm{oz} ., 15 \mathrm{c}, ; 1 / 4 \mathrm{lb} ., 20 \mathrm{c} . ; \mathrm{lb} ., 50 \mathrm{c} . ;$ bu., $\$ 5.00$.

## RADISH.

See pages 37-39.
NON PLUS ULTRA, OR EARLY DEEP SCARLET TURNIP, FORCING.
This is unquestionably the smallest topped, quickest to mature and finest colored Radish ever introduced. It is by far the best strain of early Radish for forcing. Beds are planted, the crop matured and sold, and the same bed made ready for a second planting-all in 30 days. No gardener can afford to grow common sorts when he can get seed of the Non Plus Ultra, the earliest forcing and handsomest of the Scarlet Turnip class.

Per packet, $5 \mathrm{c} . ;$ oz., 10 c .; $2 \mathrm{oz} ., 15 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 25 \mathrm{c} . ; 1 \mathrm{~b} ., 80 \mathrm{c}$.


Non Plus Ultra, Forcing.


## Early Scarlet Turnip, White Tipped, Forcing.

This is a beautiful variety. The radishes are deep scarlet, except the tips. which are pure white. This makes a pretty contrast and causes the variety to be much sought for the table on account of its ornamental character. It is becoming very popular in market, and is one of the best early forcing radishes.

Per packet, 5c.; oz., 10c.; 2 oz., 15c.; 1/4 lb., $25 \mathrm{c} . ; 1 \mathrm{lb} ., 80 \mathrm{c}$.

## Long Deep Scarlet, White Tipped.

In this we have as great an improvement in the early out-door radishes as the Non Plus C7tra and Scarlet Turnip White Tipped, Forcing, are among the frame varieties. The deep, rich body color contrasted with a clear white tip, and the perfect shape and large size, make it the most attractive to the ordinary American of any sort on the list. It is as good as it is beautiful and the best early sort for the garden.

Per packet, 5c.; oz., 10c.; 2 oz., $15 \mathrm{c} . ; 3 / 4 \mathrm{lb} ., 25 \mathrm{c} . ; \mathrm{lb} ., \$ 1.00$.

## forg Black Şammer.

This new variety has all the hardiness and long keeping qualities of the winter radishes, and also does well when planted early, so that it follows the spring sorts, thus giving a continuous supply throughout the season.

Per packet, 5c.; oz., 10c.; 2 oz., 15c.; $\neq 1 \mathrm{lb} ., 25 \mathrm{c} . ; 1 \mathrm{lb} ., \$ 1.00$.

## SPINAGE.

See pages 40-41.

## Song Standind Priekly.

This is the largest, thickest leaved and best keeping Spinage we hare ever seen. It is very hardy, standing the winter better than any other, and is equally desirable for summer planting. It gives the largest weight of thick, tender leaves of any sort, and remains a long time in condition for use. We think it the best Spinage.


## MAMMOTH : SUMMER : CROOKNECK.

## THE BEST SUMMER SQUASH IN THE COUNTRY,

## The Most Profitable for the Market Cardener.



We obtained a small amount of the seed of this variety in 1888 , but have been unwilling to offer it until we had eliminated a tendency to produce running vines and some ill shaped fruits. We have been very successful, and this is now the most uniform stock of summer squash in the country. The best way we can describe this squash is to say that it is like the well known common Summer Crookneck, except that the FRUITS ARE UNIFORMLY TWICE AS LARGE, far more warty, and are produced SOME DAYS EARLIER. We are certain that if one gardener in a neighborhood plants this, while all the rest plant the common stock, it will be impossible for them to sell any squashes until all the MAMMOTH are gone.

Per packet, 10c.; oz., 40c.; 2 oz., 75c.; 1/4 lb., $\$ 1.25 ; \mathrm{lb} ., \$ 4.00$.

## $\Rightarrow \mathrm{T} \odot \mathrm{M}$ ATO梳

See pages 43-45.

## ATLANTIC PRIZE.

We have no hesitation in offering this as the best and earliest of the extra early sorts, and invaluable to those to whom earliness is the first consideration.

Per packet, 10c.; oz., 35c.; 2 oz., 60c.; 1/s lb., \$1.00; lb., \$3.50.


Atlantic Prize.

## EARLY RED APPLE.

The best tomato for the ordinary kitchen garden. Wonderfully vigorous and productive, the fruit increasing in size and quantity until the vines are killed by frost. If you want to be able to pick an abundance of beautiful, round, smooth tomatoes every day from about August 1st until the snow flies, set out 10 or 12 plants of this variety.

Per packet, 5c.; oz., 35c.; 2 oz., 55c.; $1 / 4 \mathrm{lb} ., \$ 1.00 ; \mathrm{lb} ., \$ 3.00$.

D. M. Feray \& Co's Optimus.

## D. M. Ferry \& Co's Optimus.

Although we have tested carefully every new sort offered, we have found no kind which equals our Optimus in quality of the fruit. For those who can appreciate quality and want for their table the best flavored tomato that can be grown, there is no kind so good as this.

Per packet, 5c.; oz., 25c.; $2 \mathrm{oz} ., 40 \mathrm{c} . ; 1 / 4 \mathrm{lb} ., 75 \mathrm{c} . ; \mathrm{lb} ., \$ 2.50$.

## Essex Early Hybrid.

We were tempted to give our stock of this a distinct name as a new variety. It is a great improvement in earliness, smoothness and quality over that usually sold and is the best purple fruited tomato.

Per packet, 5c.; oz., 20c.; 2 oz., 35c.; 1/4 lb., 60c.; lb., $\$ 2.00$.

## TROPHY.

We have given a great deal of attention to the improvement of this standard tomato, and can confidently recommend our stock as unquestionably the most even and true to type of any in the country. This variety is a great favorite among canners.

Per packet, 5c.; oz., 25c.; 2 oz., 40c.; 1/4 lb., 75c.; 1b., \$2.50.

# OTURNP.E 

 extra early purple top milan.
-THE Best Exitra Early Sort,

Having an exceedingly small top, and forming
SMIOOTH, BEAUTIFUIIX COLORED ROOTS,
Having almost no tap.
Per packet, 5c.; oz., 10c.; $2 \mathrm{oz} ., 15 \mathrm{c}$. ;


# Purple Top White Globe. 

## THE BEST GENERAL CROP TURNIP.

It has LARGER and HEAVIER ROOTS than the old Purple Top Flat Sort, and is fully as HANDSOME IN COLOR, while for richness and delicacy of flavor it is not second to any other turnip.

Per packet, 5c.; oz., 10c.; 2 oz., 15c.; 1/4 lb., 20c.; lb., 60 c .


Monarch, or New Tankard, Ruta Baga.

# Monacti, of Iew Tanlaric Ruta Baga. 

WILL YIELD LARGER ROOTS AND MORE OF THEM ON AN ACRE THAN ANY OTHER SORT.

## A GRAND NELU VARIETY

Having enormously large, tankard shaped roots, short and small necks, and relatively small tops.

The skin is dark purplish-crimson above ground and yellow below; flesh rich, yellow, very

## Solid and Fine Grained

AND OF THE

## HIGHEST QUALITY.

Owing to the fact that the roots grow so well above ground, making it a comparatively Easy Matter to Harvest Them, this sort can be
grown at less expense per acre THAN ANY OTHER.

DO NOT FAIL TO PLANT THIS LARGELY FOR THIS YEAR'S, CROP.

Per packet, 5c.; oz., 15̌.; 2 oz., 25c.; 1/4 lb., 40c.; lb., $\$ 1.50$. xii

1891is at hand. and again we present to our patrons our new Seed Annual, illustrated. descriptive complete to date. and containing all that is best in garden and field culture. Since we have issued this for nearly forty years, it would hardly seem necessary to preface our list by a statement of our facilities for furnishing the best seeds, and yet we do so for two reasons; first, because this Annual will reach the hands of many hundreds of new readers, and again, because with the constantly increasing interest and skill in the production of superior vegetable and flower seeds planters are becoming more and more critical. They are realizing as never before the extent to which their success depends upon the quality of the seeds they use. We neel. therefore, to give even our former patrons a statement of the improvements in our facilities for growing and handling seeds, and to assure them that we do not rest upon what we have accomplished. We are constantly making successful efforts to further improve the varieties, the quality, and the purity of the seeds we offer.

First, how are our seeds grown? Just outside of Detroit are

## Our Greenfield Seed Farms

They extend one and one-quarter miles on Grand River Avenue in one direction, and one mile to the Joy Road in another. The tract is nearly level and mainly of a rich, sandy loam, but portions are heavier, becoming in some places a stiff clay. The whole is thorvughly tile drained, and we are enabled to work it when it is impossible to go into adjoining undrained fields. These farms are stocked with an abundance of tools especially fitted for use in seed growing. They are also proviled with large and finely arranged buildings for drying and curing seeds, and with sheds for composting and storing fertilizers. Of the latter we annually use 4,000 two-horse loads of stable manure, or its equivalent in blood, meat and bone from the Detroit packing houses, besides large quantities of lime. potash. etc. On these farms 7.0100 to 8.000 days labor are expented yearly, and they are under the management of one of the most experienced and successful seed growers in America. Our


A Warehouse at D. M Ferry \& Co's Greenfielo Seed farms.
farms at Greenfield are chiefly devoted to producing the seeds of such regetables as Onion. Beet. Parsnip. etc.. which require two years to perfect seed. Some idea of their capacity may be gained from the fact that in a single season we have harrested 60,000 pounds of onion seed. 128,000 pounds of beet and 10.01 .1 pounds of parsnip, besides smaller quantities of many other sorts. An evidence of the quality of this product is the fact that the onions which are left after selecting our seed stock are eagerly sought for by dealers at considerably more than the market price.

## OUR OAKVIEW STOCK SEED FARM.

This is a more recent purchase and contains over 200 acres within the corporate limits of the city of Pontiac. some 25 miles from Detroit. The surface is rolling and the soil chiefly an exceedingly rich and productive clay loam, althongh the farm includes quite a number of acres of black muck and of warm, quick, sandy soil. After examining a great many farms this one was selected as being particularly well adapted to the purpose for which we designed it, namely, the produetion of stock seeds, or seeds from which the seeds we offer are grown. Here there is the same julicious managrement, thombugh culture and liberal use of manure as at Greenfield, and equally good crops are the result. but quantity of product is not conl-
sidered at all. Our sole object at Oakview is to secure seed of the best possible trpe. regardless of guantity or cost. In sidered at all. Our sole object at Oakview is to secure seed of the best possible type. regardless of quantity or eost. In pursuit of this ohject the fields are gone over frequently and only perfect plants allowed to stand, all others heingr remereat. until at harvest time frequently not a tenth of the plants which at first made up a full stand are left. It this farm we pay special attention to Beans, Corn, Tomatnes, Cucumber and squash. So high is our standard. and so rigorous the rejection of

## CONTRACTS WITH GROWERS.

Having in the above manner secured select stock seeds, and knowing by extensive observation and experience the best locality in America or Europe for producing each variety, we make costracts with mapmrimwced aid reliable growers for crops to be grown from stock serds wh ich we furnish them. In this way and under wur own general direction and suprervision, 15.000 acres are planted for us in seed crops eath year. exelusive of frass. (lover. Fodder Corn and other similar farm seeds. By visits for inspection and careful directions we are able to maintain in such seeds the same excellence that we would secure were they grown on our own farms. To be certain of this we make use of


## OUR TRIAL GROUNDS

on Ferry Avenue, which oceupy about ten acres and are beyond question the largest in America. Of the thousands of lots of seed we annually handle, a sample of each must come here for two tests, the first for vitality, to find how many seeds in a hundred will grow, and the second for purity, to find out the character of the vegetables each sample will produce, whether true to name and type or otherwise. It is the latter test which enables us to detect the worthlessness of a great many so-called "new and improved " sorts or "novelties," and to prove the merits of the few which are really deserving and ultimately find a place in our list.
These grounds are in charge of an experienced and competent superintendent, and the work is done in the most thorough and careful manner. Upwards of 10,000 tests are annually made. These are not confined merely to our own stock, but tests are made as well of samples of the standard kinds obtained from all the larger seedsmen of this country and Europe, so that we know the quality, not only of the goods we sell, but of those offered by others. Our Trial Grounds have been compared with others the world over, and by competent and disinterested judges have
been awarded first place for size, for the skill and
Trial Grounds-Office and Green-House. care shown in the work, and for consequent reliability of results obtained. And now let us look for a moment at

## OUR CENTRAL SEED WAREHOUSE.

This building, erected by us in 1887, covers one-half a city block, extending 300 feet on Brush Street and 120 feet each on Croghan and Champlain Streets. It has six stories, besides a basement, affording between seven and eight acres floor surface. It is as nearly fire proof as possible, being built after the mill construction or slow burning plan, and protected in every part by an effective system of automatic sprinklers, one or more of which would be set going by the heat of an incipient fire and extinguish, or at least hold it in check, till help could arrive.

Three powerful hydraulic elevators and three stairways provide access to all parts of the building, and a thousand Edison incandescent lamps illuminate it at night. A great deal of thought was expended in the arrangement of the interior, and we have done everything that experience could suggest to make this the most perfect seed house in the world. In addition to this building we annually occupy several others a portion of the year, besides taxing to their utmost the warehouses on our seed farms.

Stepping across Brush Street from our Central Seed Warehouse, we enter

## OUR BOX FACTORY.

This three-story brick building, erected and maintained especially for the manufacture and repair of our boxes, supplies heat and power to our warehouse, and in our busy season keeps 100 men at work with numerous machines designed especially for us. These machines accomplish every kind of mechanical work, from sawing and planing rough lumber to nailing, screwing and sandpapering the finished box. We make annually 35,000 boxes, requiring three-quarters of a million feet of cherry, walnut and pine. Our use of lumber is so extensive that we maintain a lumber yard of our own, where we carry a large stock of the finest grade.

## OUR CANADIAN BRANCH.

We also have a separate branch house in Canada for the better accommodation of our large business there. This house is located at Windsor, Ont., and from it we execute promptly all orders in large or small quantities by mail, express or freight,

D. M. Ferry \& Co's Canadian Warehouse.
without any of the vexatious delays and expensive processes of entering and paying duties. Our stocks are imported directly into Canada, and a duplicate will be found there of nearly everything we sell in the States. The advantage of this move to our Canadian friends cannot be overestimated, as it places them on a par with our patrons in the States.

## OUR SEED ANNUAL.

And now just a word about the character of our Annual. As usual it does not abound in highly colored plates, nor in pages densely begrimed with false and flashy illustrations of impossible flowers and vegetables. We do not exhibit leviathan cabbages to be surmounted only by the aid of scaling ladders, nor melons requiring a house mover's outfit to transport them. "Jack and the Bean Stalk" will do for children, but sky-reaching vegetables are scarcely in their proper place in a seed catalogue. Such things may catch the eye, but ought not to inspire confidence, and we believe they cannot do so. The cuts and descriptions in our Annual are designed to convey the most truthful possible conceptions. The cuts are drawn from the living vegetables "to scale," that is, made the same size in relation to each other as the live originals. The descriptions are as truthful as the cuts. In making additions to our list from time to time, it has not been enough for us that such varieties were new, we have aimed to include nothing which is not also of permanent value. In short, we have determined to make our Annual helpful to our customers, first in enabling them to select the varieties best suited to their needs, and second, in helping them to cultivate successfully what they do select, and so continue their patronage with us.

# Formation and Management 

# VEGETABLE GARDENS 



SITUATION AND EXPOSCRE.-One of the most frequent causes of failure of the vegetable garden is the attempt to combine it with the orchard and small fruits. Good regetables cannot be grown in the shade. and even if the space is limited, it is better to have a very small vegetablegarden unshaded than to attempt to grow them in an orchard. A second cause of failure is so arranging the garden that a horse cannot be used in cultivation. On the farm especially it should be placed so as to be easily reached from the barn. Abrupt slopes in any direction are to be aroided. A gentle inclination to the south and east is the warmest. will give the earliest vegetables. and be best for Corn, Melons. Tomatoes. etc... but it suffers more from a spring or early fall frost. because of receiving the direct rays of the morning sun. An inclination to the north and west is later. suffers less in a drought, and is the best for Peas. Cabbage, Lettuce, etc. So it is an advantage in a large garden to have both these exposures, but for small gardens a gentle inclination to the south and east, or a level surface, is the best.

SOIL.-A good garden can be made on any soil, but that best suited to the purpose is a deep, rich, friable loam, resting on a sand or gravelly subsoil: and the more nearly other soils can be made to approach this the better. This may be accomplished in tenacious clays (and must be for a good garden) by good drainage. deep and judicious cultivation. use of coarse manure, and liberal applications of leached ashes, sand. and in some cases of peat. If the soil is naturally too light and sandy, it may be improved by rolling and the use of large quantities of well composted manure and muck, and by dressings of clay.

SIZE AND FORM.- A single bed ten feet square, well manured, well spaded, and thoroughly cultivated and cared for, will produce more good regetables, be more profitable, and give better satisfaction. than an acre unmanured. half prepared, and poorly cared for. Our golden rule for size is, make your garden no loiger than you can prepare and care for in the best possible manner. If it all has to be done by hand, it will take the entire time of one man to keep in good order a garden of one acre, but if it is so arranged that the horse cultivator can be used, he can care for four times that area. In rillage gardens, the form is usually determined by that of the lot. but where there is a choice. a rectangle several times longer than wide. the sides running from north to south, is the most economical: if this can be so placed that a space of eight feet wide at both ends or along both sides can be left for a horse to turn in, it will be a great advantage.

DRAINAGE.-Nothing is more essential for a good garden than good drainage. It is impossible to raise a supply of fine regetables without it. If the soil is at all wet it should be well drained with tile, but if this is not possible. something can be gained by ploughing or throwing the ssil up into beds from six to thirty feet wide, with smooth bottom trenches between them to collect and carry off the surface water.

MANCRES.-For garden purposes there is nothing better than well rotted stable manure. with which tobacco stems, bones leares, or any refuse regetable or animal matter may be composted with adrantage. It should be appliml at the rate of one ton or an ordinary wagon load for every 50 square feet. This should be ploughed in unless the soil is quite sandy and the manure very fine, when it may be applied on the surface, and simply harrowed or raked in. Plaster, salt, wood ashes, guano, ground bone. all are valuable and can be used to adrantage in connection with the stable manure. Plaster should not be applied until the plants are well up. Ashes should not be mixed with the other manures. and may be sown hroadcast and raked in just before planting. Guano, ground bone and superphosphate should be applied to the surface just hefore planting. spreading it about as thick as saw dust is usually spread on a floor. or using $1.0(4)$ to $2.5(x) 11$, s. to the acre. and carefully rakerl into the surface soil. for if it comes in contact with the seed or starting roots it will kill them. in sume cases sand, leached ashes and peat on clay soils, and clay and muck on sandy soils. will prove as raluable as manures. (lecasionally a spot which has been used for a garlen for many years will become unproductive in spite of liberal manuring. We know of no other remedy than to abandon it for a garden, seed down to clover and allow it to remain two years, when it may be ploughed under, and the garden will be found to have regained its original fertility

PREPARATION OF THE GROCND.-Thorough preparation of the ground is of vital importance in raising good vegetables; if this work is well done. all that follows will be easier. The garden should be well plomeherd or spaviral. takincare if it is a clay soil that the work is aot done when it is ton wet. If a handful from the hottom of the frurrow mombls with. slight pressure into a ball which caunot be easily crumbled into fine earth again. the snil is too wet, and if ploughed then wili be hard to work all summer. The surface should be made as fine and smooth as possible with the harrow or rake. and in case of sandy soils it should ine rolled with a heary rollor. It is generally necessary to phough the whole garden at ance. and to do this in time for the earliest crops, bat the part which is not planted for some werks shouhd be kept hrellow ly frepumt cultivation. Stiff clay ssils are fremently wonderfully improred by trenching. that is, spadmer two fret deef in surfo a was
 adjoining and parallel with it one spade deep. The remaining earth of the second trench is then thrown into the first ath covered with the surface soil from a third trench; the balance of the third is then thrown into the second and corered with the surface of the fourth: and so on until all is worked over, when the soil from the first trwheh is theat th fill the whe. This is quite expensive. but frequently changes a soil upon which nothing can be grown into one draducing the fincst verentalins. and its effects last for several years.

ARRANGEMENT. - In the city zardens or where most of the work is done by haml. this may lee entir, ly a matter of taste, but it is quite important to have the garden so arranged that most of the work can lim done liy horse pow or. Wi. .on best point out the things to be considered in the arrangement by means of the accompanying illustmation. The prints fanmi by this plan are:-

First.- Ability to cultirate the ground. All but a strip seren and one-half feet wide wetween the Beetcand Bush Fenns can be worked by any common one-horse cultivator.
socond.- Placing those regetables which may stay out all winter side by side, where they will not interfere with next season's ploughing.

Third.-Arranging the regetahles very nearly in the orler in which they should be planted or set out in the sprimg This would be nearly perfect, except in case of the Cucumbers, if the late Cabbage were to follow the Tomatoes.

Fourth. -Providing for easy rotation of crops by simply reversing (with the exception of the permanent row of Asparagus and that of the Parsnip and Salsify the plan.

The number of rows of each vegetable and the relative proportion of each may in rarime aconcilt:cto then wants of the family, but the jroportion given bere will be found to suit most families who depremel unen the garlon tiar lath wintes ant summer vegetables.

If necessary, the turning ground at both ends may be filled with Winter Squashes, as these are planted so late and at such a distance apart that they would not seriously hinder the turning of a steady horse with a careful driver. Whatever the arrangement followed may be, we earnestly urge that every effort be made to secure straight and perfect rows. There is, perhaps, no one thing that will make the subsequent cultivation easier, or contribute more to the owner's satisfaction in his garden than this, and a little extra effort in this respect at the first will give pleasure all through the season.

EAST.

|  | Asparagus. |  | barb. | Artichoke. ${ }_{\text {¢ }}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Parsnip. $\quad$ Salsify. P. |  | rs, follow | by Fall Spinage. |
|  | Peas. |  |  | + |
|  | Early Potatoes or Peas, | wed by Celery. |  | + |
|  | Early Cabbage and Caul |  |  | + |
|  | Beets. |  | Turnips. | $\pm$ |
|  | Lettuce, early and late. | Winter Radish. | Endive. | Parsley. $\mathrm{Cl}^{\text {ctu }}$ |
|  | Onions, with early Radis | wn in row. |  | $\mathrm{Cl}_{2}^{4}$ |
|  | Bush Beans. |  |  | ลैّ |
|  | Late Cabbage. |  |  | - |
|  | Early Corn and Summer | ash. |  | - |
|  | Late Corn. |  |  | $\pm$ |
|  | Tomatoes and Pole Bean |  |  | - |
|  | Musk and Water Melon. |  |  | + |
|  | Winter Squash. |  |  | $\underset{\infty}{\text { ¢ }}$ |
|  |  |  |  | + |

## WEST.

SOWING THE SEED.-There is no more prolific source of disappointment and failure among amateur gardeners than hasty, careless or improper sowing of the seed. A seed consists of a minute plant minus the roots; with a sufficient amount of food stowed in or around it to sustain it until it can expand its leaves, form roots and provide for itself, the whole enclosed in a hard and more or less impervious shell. To secure germination, moisture, heat and a certain amount of air are necessary. The first steps are the softening of the hard, outer shell, the developing of the leaves of the plant from the absorption of water, and the changing of the plant food from the form of starch to that of sugar. In the first condition the food was easily prese ved unchanged, but the plant with its undeveloped leaves and no root was incapable of using it, wule in its sugary condition it is easily appropriated; but if not used it speedily decays itself and induces decay in the plant. A seed then may retain its vitality and remain unchanged for years, while after germination has commenced, a check of a day or two in the process may be fatal. There is no time from that when the seed falls from the parent plant until it in turn produces seed, ripens and dies, when the plant is so susceptible of fatal injury from the overabundance or want of heat and moisture, as at that between the commencement of germination and the formation of the first true leares, and it is just then that it needs the aid of a gardener to secure favorable conditions. These are:-

First.-A proper and constant degree of moisture without being soaked with water. This is secured by making the surface of freshly dug soil so fine that the smallest seeds may come in immediate contact on all sides with the particles from which they are to absorb the required moisture and the pressing of the soil over the seeds so firmly with the feet or the back of the hoe that the degree of moisture may remain as nearly as possible the same until the plants are up.

Second.-A proper degree of heat, secured by sowing each variety of seed when the average temperature of the locality is that most favorable for its germination. This may be learned from a careful study of the following pages and the experience of the most successful gardeners of your vicinity.

Third.-Covering the seed to such a depth that while it is preserved at a uniform degree of heat and moisture, the necessary air can readily reach it, and the tiny stem push the forming leaves into the light and air. This depth will vary with different seeds and conditions of the soil, and can be learned only from practical experience. In general, seeds of the size of the Turnip should be covered with half an inch of earth pressed down, while Corn may be an inch, Beans two or three and Peas two to six inches deep.

Fourth.-Such condition of soil that the ascending stem can easuy penetrate it, and the young roots speedily find suitable food. We can usually secure this by thorough preparation of the ground, and taking care never to sou fine sects uhen the yround is wet. Occasionally a heavy or long continued rain followed by a bright sun will so hake aud erust the surface that it is impossible for the young plant to find its way through it, or a few days of strong wind will so dry the surface that no seed can germinate. In such cases our only remedy is to plant again.

CULTIVATION.-Every weed should be removed as soon as it appears, especially while the plants are young: this will require almost daily attention, but if well done early in the season the later work will be light, but mere destriction of weeds is by no means the only object of cultivation. A. J. Downing, who was perhaps the best horticulturist America has known, said: "If I were to preach a sermon on horticulture. I should take as my text. 'stir the son,." and certainly the text would contain much of the gospel of successful gardening: frequent and deep stirring will enathe one to grow fine regetables on comparatively poor and slightly manured soil, while without it one fails to gain much advantage from the richest and finest soil. Care should be taken that the cultivation is not done when the soil is wet. or Peas, Beans and Melons stirred when the leaves are wet with dew, as such disturbance is liable to injure the leaves. and make them susceptible to injury from rust. With this exception, cultivate as often and as thoroughly as possible.

VIEW ON D. M. FERRY \& CO'S TRIAL GROUNDS-EXAMINING PEAS.

## H○T~BEDS.

For early regetables, some provision for starting certain plants earlier than can be done in the open air is neceszary: for this purpose nothing is better than a good hot-berl. and its construction is so simple and the expense so light that ferry garden shoula have one. A hot-hed proper not only protects the plants from the cold, but supplims in,tom herat. IBy this term the gardener means that the soil is constantly kept several degrees warmer than the air above. that being the conitition so far as heat is concerned which is most favorable for rapid and vigorous growth. It is evident that to prorince this wh must in some way apply our heat below the surface. and it is usually done by making a compact pile of some fermenting matrrial and covering it with the earth in which the plants are to grow.

HEATING MATERIAL.-The best heating material that is easily arailable is fiesh horse manure containing a liharal quantity of bedding. which may be straw, shavings, or best of all. leaves. Such manure if thrown into a lowne lile. will heat violently and unerenly and will soon become cold. What is wanterl in the hot-bed is a steady and morderate but lanting Leat. To secure this. the manure should be forked orer and thrown into a loose pile. which should remain undisturbed for a few days, and then be forked over again. piled and allowed to heat a second time. whell after a few days more it will be ready for use. The object of this repeated forking over and piling is to get the whole mass into a uniform degree of fermentation.

SASH.-Gardeners commonly use sash made especially for hot-beds and glazed with small lights cut from odrls and ends and so furnished at very low rates. Such sash can usually be procured in any of our large cities. and cost much less than if made to order. For garden use, however. we much prefer a small size that can be easily handled. and the use of larger and better glass. We would recommend that the sash be three by five feet, and that the glass be not less than $10 \times 14$, laid with not more than one-quarter inch lap. In giving the order to one unaccustomed to the work, it would be well to state what they are to be used for, and that they need to be made like sky-light sash

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

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

MAKING THE BED.-This requires careful attention, as future success depends largely upon the manner in which this work is done. Having cleared away all snow and ice, build a rectangular bed one foot larger each way than the frame to be used, carefully shaking out and spreading each forkful, and repeatedly treading down the manure so as to make the bed as uniform as possible in solidity, composition and moisture; unless this is done one portion will heat quicker than the


Interior of Testing House on Trial Grounds others, and the soil will settle unevenly, making it impossible to raise good plants. The proper depth of the bed will vary with the climate, season, and the kind of plants to be raised. A shallow bed will give a quick, sharp heat and soon subside; a deeper one, if well made, will heat more moderately but continue much longer. For general purposes, a bed one and a-half to two feet deep will be best

The bed completed. the frame and sash may be put on, and fresh manure carefully packed around the outside to the rery top (if the weather is at all severe, this outside banking should be replenished as it settles). The bed should then be allowed to stand with the sash partially open for a day or two tr allow the steam and rank heat to pass off. The earth should then be put on and carefully leveled. Care should be taken that the soil is dry and friable. If wet or frozen soil must be used, it should be placed in small piles until well dried out before spreading. The heat at first will be quite violent. frequently rising to 120 degrees. but it soon subsides, and when it receins to 910 degrees the seed may be planted. The importance of using iry soil and allowing the first rank heat to pass off is rery great. Erery season thousands of hot-beds fail of good results from these causes, and seedsmen are blamed for failure resulting from over heat or wet, soggy soil.

MANAGEMENT OF THE BED.-The essentials for success are a steady, uniform degree of heat and mcisture; keeping the soil at all times a few degrees warmer than the air. and the careful "hardening off " (by exposure to the air and diminishing the supply of water) of the plants before transplanting into the open air. Simple as these serm to be there are many difficulties in the way of securing them, prominent among which are overheating the air under a bright sun. Without experience one would scarcely believe how quickly the temperature inside of a well built hot-bed will rise to on or 10 m degrees upon a still. sunny day, even when the temperature outsile is far below freezing. or how quickly the temperature will fall to that outside, if upon a windy, cloudy day the sash is left open ever so little; besides, such a rush of cold air driven over the plants is far more injurious than the same temperature when the air is still. Again. a bed will go several days without watering when kept closed during cloudy weather, but will dry up in an hour when open on a sunny day. The details of management. however. must be learned by experience, but may easily be acquired by one who gives the matter careful attention, keeping constantly in mind the essentials given above.

A COLD FRAME is a simple construction of boards for wintering cabbage, lettuce, cauliflower. brocoli. etc.. fur planting out early in the spring.

Select a dry: southern exposure: form a frame from four to six feet wide and as long as required. The back should be fourteen and the front six inches high, with a cross tie erery three feet. Seeds of the above named vegetahles, sown in open border early in September, will be ready to plant in cold frames about the last of Getober. The soil should be well prepared and smoothly raked before planting. Admit air freely on all pleasant days, but keep close in severe weather.

These frames are particularly useful in the South, and mar be covered more cheaply with cloth shades than by sash. The shades are made as follows: Make light but strong wooden frames to fit orer the bed, and of a width to reeeive some common brand of cotton cloth. The cloth may be unbleached. and should be stretched over and securely tacked to the frames. Coating the cloth with oil, as is sometimes recommended. we find is of no advantage, but we have forme the llant Bed Cloth prepared by the U.S. Waterproofing Fiber Co., of New York, to be superior to ordinary cloth for this purpuse

SHADES.-In the South it is frequently desirable to shade beds of seedlings. This can best be done by shades made as follows: Make light frames the length of the width of your bed and four feet wide: to these tack common lath so as to leave from one to three inches between them. Support them about eight inches above the plants by tacking the frames to short stakes or securing them by easily removed pins. They are more effective if the beds are so placed that the lath will run north and south.

TRANSPLANTING. - In transplanting, the main points to be regarded are, care in taking up the plants so as to avoi,t injury to the roots. planting firmly so as to enable the plant to take a secure hold of the soil. reducing the top to prevent evaporation, and shading to prevent the hot sun from withering and blighting the leaves. In transplanting from a inot-hed. harden the plants by letting them get quite dry a day or two before, but give an abumdanee of water a the homes before they are taken out. It is most apt to be successful if done just at evening, or immediately before or churing the first part of a rain. about the worst time being just after a rain, when the ground being wet it is imposifble to sufficiently press it about the plant without its baking hard. If water is used at all, it should be used freely and the wet surface immediately covered with dry seil.

WATERING. - The best time to water plants is at sunrise or just at erening, and always use rain water when it is to be had. If well water is to be used it should be exposed to the sun until it is of the temperature of the air. hefore it is apylied. Water may be giren to the roots at any time, but should never be sprinkled over the leares in the hot sum. for it will make them blister and cover them with brown spots wherever it tonches. If watering a plant has been commenced. keep on until the necessity ceases, or more injury than good will result from it: one copious watering is better than a little and often. The use of the hoe should always follow the watering pot as soon as the ground becomes dry

## VALUABLE TABLES.

Quantity of Seed requisite to produce a given number of plants and sow an acre of ground.


## Number of Plants or Trees to the Acre at given Distances.

| Dis. apart. |
| :--- |
| 12 x |
| 1 |
| 12 I |
| 3 | In.


| No. plants. ......522,720 |
| :---: |
| ...... 174,240 |
| . . 43,560 |
| 392,040 |
| .348,480 |
| ..116,160 |
| .. 29,040 |
| . 19,360 |
| . .313,635 |
| 15,681 |
| .261,360 |
| . 15,520 |
| .. 10,890 |
| .209,088 |
| . . 34,848 |
| ... 17,424 |
| .. 13,068 |


| Dis. apart. | No. plants. |
| :---: | :---: |
| $30 \times 20 \mathrm{In}$. | 10,454 |
| $30 \times 24$ " | 8,712 |
| $30 \times 30$ " | 6,970 |
| $36 \times 3$ " | 58,080 |
| $36 \times 12$ " | 14,520 |
| $36 \times 18$ " | 9,680 |
| $36 \times 24$ " | 7,260 |
| $36 \times 30$ " | 5,808 |
| $36 \times 36$ " | 4,840 |
| $42 \times 12{ }^{\text {¢ }}$ | 12,446 |
| $42 \times 24$ " | 6,223 |
| $42 \times 36$ " | 4,148 |
| $42 \times 42$ " | 3,556 |
| $48 \times 12$ " | .10,890 |
| $48 \times 18$ " | 7,790 |
| $48 \times 24$ " | . 5,445 |
| $8 \times 30$ |  |


| Dis. apart. $48 \times 36$ In. | No. plants. .3,630 |
| :---: | :---: |
| $48 \times 48$ ". | 2,723 |
| $60 \times 36$ " | 2,901 |
| $60 \times 48$ " | 2,178 |
| $60 \times 60$ " | .1,743 |
| $8 \times 1 \mathrm{Ft}$. | . .5,445 |
| $8 \times 3$ " | ...1,815 |
| $8 \times 8$ " | 680 |
| $10 \times 1$ " | ..4,356 |
| $10 \times 6$ | . 726 |
| $10 \times 10$ " | 435 |
| $12 \times 1$ " | .3,630 |
| $12 \times 5$ " | 736 |
| $12 \times 12$ " | 302 |
| $16 \times 1$ " | 2,722 |
| $16 \times 16$ " | 170 |

## Weight of Various Articles in the State of Michigan.


*In Chicago and all the other large seed markets of the country Hungarian is sold at 48 libs. per bushel, so we are compelled to conform, and we buy and sell 48 lbs . per bushel.

# Illuptrated and Degeriptive ©atalo̧̧ue 

## General Directions for Cultivation.

As usual we have endeavored to include only the best varieties, and to present their claims faithfully and with accurate descriptions.

The Terms and Prices of Vegetable Seeds will be found in the Price List, in the back part of this Catalogue.

## ARTICHOKE.

French, Artichaut. German, Artischoke.
Culture.-Sow in hot-beds and transplant into pots, or so as to give plenty of room until danger of frost is over, and then set in very rich ground, four feet apart; or the plants can be raised in seed beds nut of doors, but in that case will not be likely to produce heads the first year. The edible portion is the undeveloped flower heads, which will be produced about September 1st, and until frost. Late in the fall, cut off the old tops and protect the crowns with leaves enough to prevent severe freezing, and cover so as to pre vent their blowing off. The second year they will commence to form heads about July 1st. The plants may also be blanched like Cardoons, which is accomplished by cutting the plants in July, tying up and blanching the rapidly growing shoots like celery.

LARGE GLOBE.- The best sort for general use. Buds large, nearly round; scales deep green, shading to purple, very thick and fleshy.

## ASPARAGUS.

## French, Asperge. German, Spargel.

Asparagus is one of the earliest spring vegetables, and would be in universal use were it not for the prevalent idea that it is difficult to grow it. We think this is a mistake, and that there is no vegetable on our list that can be produced so cheaply and easily as this. It delights in a moist, sandy soil, but can be grown in any garden by following the direcfions given below. A bed $12 \times 40$ feet, requiring 75 to 100 plants, should give an abundant supply for an ordinary family.
Culture.-Beds are usually formed by setting plants one or two years old, which can be procured of us; but if you wish to grow them yourself, prepare a light, rich spot as early as possible in the spring, and after soaking the seed iwenty-four hours in warm water, sow in drills one foot apart. When the plants are well up, thin to two or three inches in the row, and give frequent and thorough cultivation during ,he summer. If this has been well done, the plants will be it to set the next spring. The permanent beds should be prepared by deep spading, working in a large quantity of cotied manure-the more the better. Make furrows four feet apart and four to six inches deep. Set the plants about two feet apart in this furrow and cover with about two inches of fine soil. After the plants are well started, give frequent and thorough cultivation, and draw a little earth into the furrows at each hoeing until they are filled. Early the next spring, spade in a heavy dressing of manure, and one quart of salt to each square rod, and cultivate well until the plants begin to die down. The next season the bed may be cut over two or three times, but if this is done all the short shoots, no matter how small, should be cut, and after the final cutting, give a good dressing of manure, ashes and salt. The next season, and ever after that the bed should give a full crop and be annually dressed with manure, ashes and salt, after the last cutting, and well cultivated until the plants occupy the whole space. In the fall, as soon as the tops are ripe and yellow, they should be cut and burned. The plants may also be set in the fall, if the ground is so well drained that water will not stand on it. The whole bed should be covered with three or four inches of coarse strawy manure or other litter, which should be removed in the spring.

CONOVER'S COLOSSAL.-A mammoth sort, frequently sending up fifteen or thirty sprouts from one to one and ahalf inches in diameter from a single plant, and spreading less than most sorts. Color deep green; quality good.

## BEANS. <br> DWARF, BUSF OR SNAP.

## French, Haricot. German, Bohne.

Under this name are classed all the low growing sorts, called in different catalogues Bush, Bunch, Snap, String or Dwarf Beans.
Culture. - No crop responds more readily to good soil and cultivation than this; that best adapted to them being a light, rich, well drained loam, which was manured for the previous crop. If too rank manure is used it is apt to make them grow too much to vine. They are all extremely sensitive to frost and wet, and it is useless to plant them before the ground has become warm and light. The largest return will result from planting in drills about three feet apart, and the plants two to eight inches apart in the row, Up to the time of blossoming they should be frequently cultivated, but this should never be done when the ground or plants are wet with rain or dew, as it would be sure to injure them; nor should they be disturbed after they commence to bloom, as it would prevent their setting well.

In the following descriptions the varieties are placed about in the order of ripening, and it is assumed that they are grown on rich, light soil, as different soils produce quite a variation in vines, pods and beans, and it is useless to expect good results from the finer garden sorts on poor or cold and wet soils. From one pint to two quarts will be sufficient to furnish a supply for an ordinary family, and varieties should be selected so as to give a succession both of string and green shelled beans. The wax podded beans are particularly liable to run "off " into green podded plants, and it requires constant attention and skillful culture to keep them pure. A comparison of our stocks of wax beans with those offered by other dealers shows them to be the purest and best strains in cultivation.
CHALLENGE DWARF BLACK WAX, ENTRA EARLY.-After two years' trial we are enabled to offer this grand new variety with the strongest assurance that it is indeed the earliest of all the wax beans. Planted side by side with all the better sorts, it has proven to be fully one week ahead of any of them, while it is fully as vigorous and prolific as the Prolific German Wax. The plants are of the same size and general appearance as that sort, pods fully as large and as of good color, but are not quite so much curved and are flatter, while the dry bean is longer, more curred and flatter, though jet black. Market gardeners and others to whom earliness is a matter of prime importance, cannot afford to be without this, which is truly the "earliest of all" the wax beans.
HLACK-EVED WAX.-Very early, V'ines medium size, erect, bearing its pods near the centre. Leaves large, thin, quite dark green in color. Pods long, straight, proportionately narrow, and rounder than those of the Golden Wax, and of a lighter color, with a medium length light green point. They cook quickly; both as snap and as shell beans. Dry beans, medium size. long, round, white, with black spot around the eye. As early and with as handsome pods as the Golden Wax, and of very good quality

## D. M. FERRY \& CO'S DESCRIPTIVE CATALOGUE.

D. M. FERRY \& CO'S DETROIT WAX.-The handsomest and hardiest of all the wax beans. Plants erect, bearing their pods near the centre, often throwing them above the foliage. Very productive; leaves large, dark green; blossoms small, white; pods straight, flat, but thick to edge; distinctly broader than the Golden Wax. They do not turn to wax color so early, but when well grown and fit for use they are of a beautiful golden wax color and of the finest pod of this variety which had rusted, and when picked and placed pod of the side of Golden Wax and others, they have remained bright, crisp and clear when all the rest were unusable, thus making it the best wax bean for shipping to distant markets. It is also one of the very best green shelled beans, and excellent dry, being very much like the White Marrow when baked. Dry beans the shape of the White Marrow, white with large patch of chocolate brown about the eye. We think this is to be the most popular of all the early market beans.
D. M. FERRY \& CO'S GOLDEN WAX.-Introduced by us, and it has been for many years the best bean for general use in cultivation, and even now it is a competitor with the newer sorts for first place. Vines medium size, erect, moderately spreading, hardy and productive, with small, smooth leaves, and small, white blossoms. Pods long, nearly straight, broad, flat, golden yellow, very fleshy and wax-like, with short, fleshy, green point, cooking quickly as snaps, and shelling well when green, and of the highest quality in both conditions. Beans medium size, oval, white, more or less covered with two shades of purplish-red.

WARDWELK'S KIDNEY WAX.-The vines of this variety are very large, strong growing and vigorous, yielding a large crop of long, nearly straight, handsome, very white and waxlike pods. They are of good quality and on this account, as well as their beauty of form and color, are easily sold, even when most sorts are a drug. They ripen about with the Golden Wax. The dry beans are large, kidney shaped, white, with dark markings about the eye. The best for market gardeners.

PROLIFIC GERMANWAXBLACK SEEDED.-We are so thoroughly satisfied with this improved strain of Black Wax that we have discarded the old strain altogether, this being more vigorous growing, far more productive, with a longer,


BLACK EYED


DMFR.00s.

whiter, more fleshy pod, and unsurpassed in flavor. very vigorous and hardy, withstanding rust exceedingly well. Flowers, reddish-white or purple. Podsmedium length, "borne well up among the foliage, curved, cylindrical, thick, fleshy, and of a clear, waxy white color, with long, slightly curve, d point; remain a long time in condition for use as snaps. Beains small, oblong, jet black. No one can afford to plant the old strain, as this is much better in every respect.
SCARLET FLAGEOLET WAX. - The Flageolet Wax, as grown in Europe, consists of two stocks, one with beans of a scarlet color, and the other with beans of similar form but deep violet or purple shade. We have separated and fixed the lighter colored bean by careful selection for many years, and now present it under the above name rather than to follow the example of others, and call it Ferry's Scarlet. Vines large, branching but erect; productive. Leaves large, very light colored; blossoms white; pods very long, flat, often curved and twisted, of a golden wax color, but rough surface, point projecting from back side of pod and very long, the pod gradually tapering into the point. We think this the most showy of all the wax beans. Quality sweet, crisp, tender, but coarse. Dry beans, large, flat, bright red.

VIOLET FLAGEOLET WAX.-Plant very large,

[^0]GERMAN WAX, WHITE SEEDED.- Vines small, stout, erect, with large, light-colored leaves, and white blossoms. Pods short, broad, flat, white. fleshy and wax-like, of medium quality, but very handsome. Beans medium size, oval, white

SPECKLED WAX.-New, distinct and very desirable Another year's trial only adds to the high opinion we had already formed of this grand new bean. Vines large, spreading, vigorous and productive. Pods long, cylindrical, crisp, tender, stringless and of a clear. yellowish. waxy white color. Excellent as snaps, but a little later than common black wax. As the pods mature, they become splashed with crimson, making them very attractive, and in this condition they may be used for shell beans. For vigor of growth and hardiness, this sort cannot be excelled: as a snap bean it is of extra good quality, and as a shell bean it is as good as the best. We know of no bean, except this, which can take the place of the Dwarf Horticultural as a shell bean, and we earnestly recommend all who have not been successful with that sort to give this a trial.

CRISTAL WHITE WAX.-Distinct but not strictly a wax bean. Very desirable for snaps or for pickles. Vines large, spreading, very productive, having many runners, producing pods in pairs throughout their whole length; blossoms small, vellowish-white; pods greenish-white, short, curved, round ur thicker than wide, with crease in the back, rery fleshy and brittle. Ripe beans small, oval, white.
D.ATE WAX. - An easily grown and hardy variety, yielding pods which will stand shipment a long distance. Vines erect, bearing a large number of pods near the center, and ripening very early and evenly. Pods long, straight, very symmetrical and handsome, clear white in color. Recommended to southern planters for early shipment. Dry beans like Kidney Six Weeks.
The following are green podded varieties, and are named about in the order of ripening, although this varies in different seasons.
EXTRA EARLY REFCGEE.-This is without any doubt, the earliest of the green podded sorts, and is, indeed, as early as the wax varieties, furnishing a full picking of well developed pods as early as Golden Wax this year, and when ordinary Refugee was only coming into flower. Vines as rigorous, hardy and productive as ordinary Refugee and about the same size, though two weeks earlier. Pods of the same size and shape and of fully as good quality as snaps. Our stock of this has been selected with great care and is extremely uniform, all the vines ripening well together.

EXTRA EARLY RED VALENTINE.-Follows Extra Early Refugee very closely, and is fully one week ahead of the Early Red Valentine. Differs in no way from that sort except in earliness; having the same vigorous and productive vines, bearing fine, fleshy, crisp and tender pods.

EARLY RED VALENTINE.-One of the finest of the green podded varieties for snaps, and by some preferred to the wax sorts. Vines erect, with coarse, dark green leaves, and large, white blossoms; pods medium length, curved, cylindrical, with crease in back, very fleshy, crisp and tender; beans medium sized; long, irregular, pink, marbled with red. Our stock is all of the improved type and fully equal to any of the "Improved Round Pod" offered at fancy prices, and has proved on trial to be much superior to many of them.


Early Red Valentine.


EARLY MOHANK.-The hardiest of any and the best to plant on poor land, and it can frequently be planted so as
to afford beans earlier than the above more tender sorts Tines large, stout, with large, coarse leares, which will stand a slight frost; blossoms large. purple; pods long. straight, coarse, with long, tapering point: beans long kidney shaped, variegated with drab, purple and brown.
CHINA REI EYE. - Tines medium, stout, erect, healthy with large leaves and white blossoms; pods short, straight. flat, and if picked young, of good quality as snaps; beans medium size, oblong, white, with reddish purple blotch about the eye. When green they are thin skinned, mealy and tender, and when dry are still the best of all for baking Farmers who want to plant a few beans for home supply should by all means, use this sort.
DWARF HORTICLLTLRAL.-Vines compact, upright, with large leaves, very productive, and furnish green shelled beans the earliest of any. Pods medium length, cylindrical, curved, with splashes of bright red on a yellow ish ground. The ripe beans are large, oval, plump, and nearly covered with splashes of bright red. This is undoubt edly the best variety as a green shelled, and when in this condition the beans are very large, easily shelled, and although of quite different form, are about equal to the Lima in quality. There are several new varieties offered as superior to this, but we, after most careful testing, think that such a stock as we offer of Dwarf Horticultural is really better both for market gardeners and for the home garden than any of them
GODDARD.-In general character like the Horticultural but much larger and coarser. Vines very vigorous with immense leaves and bearing a fair number of very large and beautifully culored pods containing five to six beans, which are the largest, when in condition for use as green shelled, of any of the bush varieties. Very showy and attractive. Dry beans like Horticultural, but larger.
EARLY YELLOW KIDNEY, SIX WEEKS.-Tines large, vigorous, branching, productive, with large leaves and lilac blossoms, pods long, straight, narrow, handsome, and when young, of good quality; beans long, kidney shaped. yellowish-drab with darker marks about the eye.
REFCGEE, OR THOESAND TO ONE.- Vines large. spreading, exceedingly hardy, with small, smooth leaves and large lilac flowers, very late, and esteemed for late planting and for use as pickles; pods long, cylindrical, green, becoming white, streaked with purple, of good quality as snaps beans long, light drab, dotted and splashed with purple
GALEGA.-Although similar to the Refugee, this is distinctly larger growing and more vigorous, and with us has proved decidedly more prolific

The following sorts are planted as field beans.
ROYAL DWARF KIDNEY. -Not as productive as some of the following, but of very superior quality. Plant large, branching, with large, broad leaves and white flowers pods medium sized, variable in shape, dark green, coarse beans large, kidney-shaped, slightly flattened, and of excellent quality, green or dry

LARGE WHITE MARROW, OR MOCNTAIN. Vines large, slender, spreading, with short runners, small leaves and small white blossoms; very prolific; pods medium broad, green, changing to yellow; beans large, clear white, ovoid, cooking very dry and mealy
EARLY MARROW PEA, OR DWARF WHITE NAVY.-A comparatively new variety developed in western New York, and not only a surer cropper and much more prolific, but of better quality than the common white bean. and the beans are so hard as to resist the attacks of the bean weevil. Vines large, spreading, with occasional runners and small, thin leaves, and small, white flowers; very prolific, ripening its crop early and all at once; pods short, straight, small, but containing six beans; beans small, oval, white, handsome and of superior quality.
PROLIFIC TREE BEAN.-A new variety often sold at a very high price with extravagant claims of its productiveness, but it is an uncertain cropper, and the claims will only be realized when one happens to have suitable soil and gives it good culture. Under these conditions it has been known to yield as high as sixty bushels per acre. Vines large, spreading, slender, with many runners having pods to the end; beans small, oval, dull white, of good quality

## BEFNNS <br> POIE, OR RUNNING.

French, Haricots a rames. German, Stangenbohne.
Cilitcre.-These are even more sensitive to cold and wet than the dwarf varieties, but are of superior quality and productiveness. After settled warm weather, set poles six to eight feet long in rows north and south four feet apart. the poles being three feet apart in the row, and set leaning to the north at an angle of about thirty-five degrees. Set in this way the vines climb better, bear earlier, and the pods are straighter and more easily seen. Around each hill plant from six to thr beans, taking care to place the eye down in the case of Lima or other flat varieties. When well started, thin to four plants, and start any that fail to climb around the pole in the same direction as the others, for they will not grow if tied up in the opposite direction. When the vines reach the top of the poles, pinch them off or train them along strings stretched on the tops of the poles. A pint or single packet of each of four or five varieties will be suffeient for a large family

 ovoid, kidney-shaped, greenish-white, flat.
KING OF THE GARDEN LIMA.-Claimed to be larger, stronger growing, more productive, and with larger pods and beans than the Large White Lima. Our stock is from the originator and should be as good as any in the market. It will come into bearing sooner. and will make larger pods if not more than two vines are left to grow on a pole.

WHITE RCNNER.- Cultivated chiefly for its beauty Vines and leaves large and coarse; blossoms in long racemes. large, pure white; pods large, broad, coarse; beans large, kidney shaped, thick, white, fair quality.

SCARLET RCNNER.-Similar to the last. but with scarlet blossoms, and the beans are lilac purple, variegated with black.

## BEET.

## French, Betterave. German, Runkel-Rube

Culture.-The best results are obtained on a deep, rich, sandy loam. If wanted very early, sow in hot-beds and transplant, cutting off the outer leaves; or for general crop, sow as soon as the ground will permit iu drills eighteen inches apart and thin out to three inches in the row. For winter use. the turnip varieties may be sown in June. If possible, always sow in freshly prepared soil, which should be pressed firmly over the seed. One or two ounces or single packets of four or five sorts will give a good supply.

ENTRA EARLY EGYPTIAN BLOOD TLRNIP.By many considered the best variety for forcing, being very early with small top: leaf stems and veins dark red; leaf dark green, dotted with red; roots very dark red, flat on top, but rounded beneath, with very small tap roots; flesh dark red, zoned with lighter shade, hard, crisp and teuder when young, but becoming woody with age.

EARLY ECLIPSE.-An improved extra early sort. Tops small, dark red shading to green on outside of the leaves. Roots nearly round with a small tap root and very small collar. Flesh dark red, zoned with a lighter red, very sweet, crisp and tender, especially when young. One of the most desirable sorts for bunching.

TMPROVED EARLY BLOOD TLRNIP.-Excellent either for forcing or for early planting. Tops small; leaf stems and veins dark red: leaves green; roots round or ovoid with small tap, dark red; flesh marbled, bright and light red, which color it retains when cooked; crisp, tender and sweet, and continuing so until full grown. A
 good keeper.

DEWING'SEARLYBLOOD TLRNIP.-Topsmedium sized; leaf stems and veins dark red: leares green; roots dark red, turnip shaped with large tap; flesh carmine red zoned with lighter shade, tender, sweet and good.

BASTLAN'S EARLY BLOOD TLRNIP.-Tops small, stems red, leaves green, roots turnip shaped with medium sized tap, bright red. Flesh purplish red, zoned with white. crisp, tender and of good quality

EARLY BLOOD TIRNIP.-Tops and necks medium sized; leaf stems and veins red withrgreen or red leaves: mots turnip shaped, deep purple, flesh blood red, zoned with lighter color, crisp, tender and sweet.

EARLY TURNIP BASSANO.-Not maturing as early as the above, but growing to a large size, may be used early,


## Early Turnip Bassano.

and is the best variety to sow for greens. Tops large; leaf stems light red; leaves light green; roots large, round, turnip shaped; flesh pink, zoned with white, very sweet and tender when young, becoming woody and tasteless with age.
D. M. FERRY \& CO'S NEW HALF LONG BLOOD.-This is an entirely new and distinct variety, by far the best for winter use. The roots are about one-half as long as the Long Dark Blood, but weigh as much on account of their thickness. They are always smooth and handsome, and their rich, dark red flesh is very sweet, crisp and tender, never becoming woody, even in portions above ground. We consider this the most valuable sort of recent introduction.

IMPROVED LONG DARK BLOOD.-The most popular variety for winter use. Tops large; neck small; leaf stems and veins red; leaf green; roots large, tapering toward both ends, growing even with the surface, dark red, flesh dark red, zoned with lighter shade, very tender and sweet, and remaining so when kept till spring.

SWISS CHARD, SILVER, OR D. M. Ferry \& Co's SEA KALE BEET.-A distinct vegeBlood. table, and much superior to the common beet for greens. If sown at the same time it will be fit for use before it. Later, the plants form broad, flat, beautiful white and wax-like stems to the leaves, which are very delicious cooked as beets, or pickled We recommend all of our customers to try it.

The following varieties are used for stock feeding. They are easily grown and harvested, keep well through the winter and give an immense amount of cattle food at a small cost, but need a rich, well prepared soil. Sow in drills thirty inches apart, as early as the ground can be got in condition. Cultivate well when young, and thin out the plants to one foot apart in the row. If these thinnings are carefully handled and the larger leaves cut off they can easily be reset to fill vacancies, and will make the largest roots. Care should be taken not to break or bruise the roots in harvesting.

FRENCH WHITE SUGAR, RED TOP.-This variety is the result of the careful selection and culture of one of the most extensive and scientific cultivators in Europe. It unites capacity for a large yield with an exceedingly rich flesh, making it the best for cattle feeding. We think that for this purpose it is much superior to the larger and coarser mangel wurzels, and we urge our customers to try it, believing that they will find it superior to any field beet they have cultivated. Tops medium sized; roots above medium size, long, top shaped, growing slightly above the surface; white, washed with red at top; flesh fine grained and very sweet.
FRENCH WHITE SUGAR, GREEN TOP.-Grown as a field beet, but liked by some for table use. Tops large, bright green; roots large, broad, top shaped, white, washed with green or brown; flesh tender and very sweet.

FRENCH YELLOW SUGAR.-Grows to a large size, much above ground; roots half long, yellow; grown in this country for feeding stock. In France it is cultivated extensively for the extraction of sugar.

LANE'S IMPROVED IMPERIAL SUGAR.-This American variety has proved the best for the uses which such beets are put to in this country. It is not so sweet as the French sugar beets grown especially for sugar making,
but the roots are longer and more symmetrical, of fine grain and very sweet, making it good for table use or for cattle feeding.


Yellow Leviathan Mangel Wurzel.
VILMORIN'S IMPROVED IMPERIAL SUGAR. -An improved variety from France. It affords the largest percentage of sugar of any known variety.


Carter's Warden Prize Yellow Globe Mangel Wurzel.

LONG RED MANGEL WURZEL.-A large, long variety, grown for stock feeding. It stands a good deal out of the ground; color light red; flesh white and rose colored.
D. M. FERRY \& CO'S IMPROVED MAMMOTH LONG RED MANGEL WURZEL.-An improvement on the old variety. The roots are uniformly straight and well formed and deeper colored than the common sort. Highly recommended for stock feeding.
NORBITAN GIANT LONG RED MANGEL WUR-ZEL.-Very large, growing well out of ground. The roots are well formed, straight, smooth and of a fine scarlet color, with comparatively small top and neck.
YELLOW GLOBE MANGEL WURZEL.-A large, round, orange colored variety, of excellent quality, which keeps better than the Long Red, and produces better crops on shallow soil.
CARTER'S WARDEN PRIZE YEL LOW GLOBEMAN GEL WURZEL. most excellent, yellow fleshed, globe variety. The tops are small, and the roots, although large, are of excellent quality. Average weight, fifteen to eighteen pounds. Highly recommended for shallow soil.
YELLOW LEVIATHAN MANGEL WURZEL. - Roots long, olive shaped, large, growing over one-half out of the ground, flesh white, sweet and tender; tops bright green, compara tively small; neck small, short. Owing to the fine flesh never becoming woody, to the small neck and top, and to the roots growing so well out of the ground, making them very easy to harvest, we think this is perhaps the best of the yellow field beets.
YELLOW OVOID MANGEL WER-ZEL.-Root ovoid intermediate between the long and globe varieties; flesh solid, usually white, zoned
Golden Tankard Mangel Wurzel. with yellow; hardy, vigorous and productive
GOLDEN TANKARD MANGEL WURZEL.-Tops comparatively small, with yellow stems and midribs; neck very small; roots large, ovoid, but filled out at top and bottom so as to approach a cylindrical form. Flesh yellow. zoned with white. A great improvement and worthy of trial on every farm.
RED GLOBE MANGEL WURZEL.-Similar to Yellow Globe, except in color, which is a light red or pink.

## BROCOLI.

French, Chou Brocoli. German, Spargel-Kohl.
Although originating from a very distinct type, the modern improved sorts of brocoli can scarcely be distinguished from cauliflower; the points of difference being that it is generally taller and the heads more divided. By some considered more delicate than the cauliflower.
Culture.-The same as that given for cauliflower.
EARLY PURPLE CAPE.--This is the best variety for our climate. It produces large heads, of a brownish-purple color, very close and compact, and of excellent flavor

## BRUSSELS SPROUTS.

French, Chou de Bruxelles. German, Sprossen-Kohl.
The plant grows two or three feet high, and produces from the sides of the stalk numerous little sprouts one or two inches in diameter, resembling cabbages. The leaves should he broken down in the fall, to give the little cabbages more room to grow.
Culture.-They should be treated in all respects like winter cabbage or kale.

## CABBAGE.

## French, Choux Pommes. German, Kopfkohl

There is no vegetable which is more universally cultivated than this. It is found in the poorest and smallest garden, and it responds so readily to better care that it is also entitled to a place in the finest garden, and merits the attention of the most skillful gardener.

Culture.- The requisites for complete success are: First, good seed; there is no vegetable where the seed has more influence on the quality of the product than in this, and gardeners should invariably select the best procurable. Second, rich, well prepared ground. Third, frequent and thorough cultivation. A heavy, moist and fresh loam is most suitable, which should be highly manured and worked deep. The early sorts should be sown very early in hot-beds, hardened off by gradually exposing them to night air, and transplanted to open ground, setting eighteen to twenty-four inches apart as early as possible in the spring. In the South sow from the middle of September to middle of October, and transplant into cold frames to keep through winter, setting into open ground as early as possible

The late autumn and winter varieties may be sown from the middle to the last of spring, and transplanted when about six inches high, three feet apart each way. Shade and water the late sowings in dry weather to get them up. It is important that the plants should stand thinly in the seed bed, or they will run up weak and slender, and be likely to make long stems. In transplanting they must be set in the ground up to the first leaf, no matter how long the stem may be.

Cabbages should be hoed every week, and the ground stirred deeper as they advance in growth, drawing up a little earth to the plant each time until they begin to head, when they should be thoroughly cultivated and left to mature. Loosening the roots will sometimes retard the bursting of full grown heads.
Of late years many crops of early cabbage have been destroyed by magsots at the roots. The best remedy seems to be to remove the earth from around the stem and apply an emulsion of kerosene made as follows: Add one quart of kerosene oil to two quarts of boiling soft soap;which has been thinned to the consistency of cream. Stir the oil thoroughly by churning or other method until it has united with the soap and forms a butter-like substance. Then dilute with five times as much water
This remedy has always succeeded in sandy soil, but may not be so effective on clay lands. On such soils we have had good success from surrounding the plants with squares of cloth, cut about six inches square, with a small hole in the center and a slit from this to the edge so that the cloth can be put around the plant. This prevents the fly from laying its eggs. The cloth will need to be held to the ground by a little earth or a few small stones.

The cabbage worms which destroy the leaves and heads later, may be killed by dusting with pyrethrum powder.
To preserve cabbage during the winter, pull them on a dry day, and turn them over on the heads a few hours to drain. Set them out in a cool cellar, or bury them. with the heads downward, in long trenches, in a dry situation. In the Middle States, bury the head and part of the stump in the open ground, and place over them a light covering of straw or boards, to protect them in severe weather.

EXTRA EARLY EXPRESS. - This is claimed to be the earliest cabbage in cultivation, and with us heads fit for use are formed earlier than on any other sort. It is similar to the Etampes, but is a little lighter in color and the heads are a little harder. Worthy of trial by those who wish to be first in the market
VERY EARLY ETAMPES.-Similar to the well known Jersey Wakefield, but repeated tests both on our grounds and at the various experimental stations have shown that it will produce heads fit for use a little earlier. The plants are lighter colored but not quite so hardy. The heads are fully as large, not quite so pointed, and are of excellent quality, and we recommend it as the best for private gardens and sheltered situations. This variety is often sold under other names, as the " earliest of all, " but we assure our customers that they cannot buy a better cabbage of this type than our carefully grown and selected stock of this rariety.

EARLY JERSEY W AKEFIELD.-Heads rery compact, of medium size, conical. An early, sure heading sort: very popular with market gardeners. Its thick, stout leaves combined with its very compact growth, make it the best for wintering over in cold frames, or for very early setting in the spring. Unfortunately the great demand for this sort has brought upon the market large quantities of coarse and inferior stock, which has tended to diminish the popularity of the sort; but when pure and good stock. such as we offer, is used, it cannot fail to give perfect satisfaction as the best first early cabbage for market gardeners.

EARLY YORK. - An early variety. Heads small, heart shaped, firm and tender: of very dwarf growth, and may be transplanted fifteen or eighteen inches apart.

EAREY LARGE IORK.-Succeeds the Early Fork. It is of large size, about ten days later, more robust and bears the heat better.

EARLY DWARF FLAT DUTCH.-As early as any large headed round eabbage grown. Stems short; leares
D. M. FERRY \& CO'S DESCRIPTIVE CATALOGUE.

comparatively few, round, upright; heads almost as large as Late Flat Dutch, very solid, standing long without bursting, and when cut are very crisp and tender. The stock we offer is true and distinct, and should not be confounded with the inferior later stock sold under this name. We think this to be as fine a summer cabbage as there is grown.

HENDERSON'S EARLY SUMMER.-A very early large heading cabbage; growth compact, so that it may be set as close as the smaller sorts. Heads large, flat or slightly conical, handsome, and they keep longer without bursting than most of the early sorts. Valuable for both family and market. This may be called an improvement on the Newark Flat Dutch, which it has superseded.

ALL SEASONS.-A greatly improved strain of early Flat Dutch. Heads very large, round, often nearly spherical, but usually somewhat flattened; very solid, and of the best quality, keeping as well as the winter sorts. Plant very vigorous but sure heading; leaves large, smooth, with dense bloom. Remarkable for its ability to stand the hot sun and dry weather. Our trial has shown that heads which were fit for market by July 10th, were still salable September 10th, the only change being increased size and density. One of the very best sorts for general cultivation.
EARLY WINNIGSTADT.-One of the best for general use, being a very sure header, and will grow a hard head under circumstances where most sorts would fail, so that those who have failed with other sorts could hope to succeed with this. It seems to suffer less from the cabbage worm than any other sort. Heads regular, conical shaped, very hard, and keep well both summer and winter.

FILDERKRALT.-Similar to, but larger, much more pointed, and heading up with fewer outside leaves than the Winnigstadt, and highly esteemed for making kraut. Good either for first or second crop, and succeeds particularly well on rich prairie soils.

FOTTLER'S EARLY DRUMHEAD, OR BRUNSWICK SHORT STEM.-In many sections, particularly in the East, this is the only cabbage grown, and it certainly is one of the very best second early sorts in cultivation. Plarfts have very short stems and large leaves which start from the stem horizontally, but turn upward beyond the head, making it remarkably compact. Head large, very flat, compact and solid, and of fine quality. We have taken pains to have our stock free from the longer stemmed coarse plants often seen in inferior stocks of this variety.

EARLY DRUMHEAD.-Plants compact, with very thick, dark green leaves covered with a dense bloom which protects them in a measure from the worms. Heads flat, very solid and of good quality.

EARLY LARGE SCHWEINFURT.-Forms a very large, showy head of excellent quality, but does not stand the heat well. When grown to perfection, one of the handsomest of the second early sorts.

MAMMOTH ROCK RED.-This is by far the best, largest and surest neading red cabbage ever introduced. The plant is large, with numerous spreading leaves. The head is large, round, very solid, and of deep red color. Ninety-eight per cent. of the plants will form extra fine heads. The best of the red cabbages.
LARGE RED DRUMHEAD, FOR PICKLING.Excellent for pickling or for eating raw. Forms very hard, oblong heads, round at top, of a dark red, or purple color.

EARLY DEEP RED ERFURT.-Plants smaller and more compact and shorter stemmed than the above, and the head is smaller, nearly round or sometimes oval, very hard and of exceedingly deep color, and one of the best keepers. Very desirable.

STONE MASON MARBLEHEAD.-Characterized by its sweetness and delicacy of flavor and by its reliability in forming a large head. Very hardy and will endure the cold of extreme northern climates.
LATE FLAT DUTCH.-A low growing variety; heads large, bluish-green, round, solid, broad and flat on the top, and ofteu tinted with red and brown. An excellent fall and winter variety and a good keeper.
D. M. FERRY \& CO'S PREMIUM LATE FLAT DUTCH. -This we consider superior to any late cabbage in cultivation. It possesses all the good qualities of the Late Flat Dutch, and is a sure header. Our stock of this variety is of our own raising from carefully selected heads, and we think it superior to any other strain of this popular variety.
LARGE DRUMHEAD.-The Drumhead cabbage is a large fall or winter variety, with a broad, flat or round head, short stump, tender and good flavored, and an excellent keeper; grown extensively for shipping purposes.
D. M. FERRY \& CO'S PREMIUM LATE DRUM-HEAD.-We recommend this sort to market gardeners and growers for shipping purposes. In good, rich soil, and with a favorable season, the heads will grow to an enormous size; very compact and solid, and of excellent flavor.
MARBLEHEAD MAMMOTH DRUMHEAD.-The largest cabbage known, weighing in some instances over fifty pounds. Under good cultivation, acres have been grown where the heads would average thirty pounds each.
OUINTAL DRUMHEAD.-A French variety corresponding to our Flat Dutch, and one of the best of the
foreign sorts. Heads quite flat on the top, with few outside leaves; solid, firm, hard, and of good flavor

GREEN GLAZED.-A standard late variety in the South, as it is not affected by the heat. Heads large, but rather loose and open. Very desirable, from the comparative immunity it enjoys from the attacks of insects.

Our English friends think the Savoys alone are fit for the table, and they certainly are of much better flavor than the smooth sorts.

EARLY DWARF ULM SAVOY.-One of the earliest and sweetest of the Savoys. Heads round. solid; leaves small, thick, fleshy, of fine, deep green color, and of most excellent quality.

GREEN GLOBE SAVOY.-This does not make a firm head, but the whole of it being very tender and pleasant flavored, is used for cooking; leaves wrinkled and dark green; is very hardy and improved by frost.

IMPROVED AMERICAN SAVOY.-Closely approaching the Cauliflower in delicacy and delicious flavor. The best of all the savoys for general market or home use. It has a short stem, grows to a large size, is compact and solid. and is a sure header.

DRUMHEAD SAVOY.-Grows to a large size. Heads nearly round, a little flattened on the top, color dark green.

## CARROT.

## French, Carotte. German, Moehren.

The Carrot is one of the most healthful and nutritious of our garden roots, and deserves to be more extensively used both for culinary and stock feeding purposes. We urge our readers to give some of the early table sorts a trial. As an agricultural root, the carrot is not surpassed for feeding horses or milch cows, and every farmer should plant a every farmer for this purpose.
few

Culture.-The carrot succeeds best on a light sandy loam, made rich by manuring the previous year. In freshly manured land, the roots often grow pronged and ill shaped. The secret of success is to secure the quick germination and rapid growth of the young plants, which may be accomplished by rich, well prepared soil, covering the seed from one-half to one inch in depth, and pressing the soil firmly over the seed with the feet or a roller. It is better to sow as early in the spring as the ground can be made ready, delayed until late in the season, soak the seed twentyfour hours in tepid water, then
 dry the surface by mixing in sifted coal ashes or plaster, and sow on freshly prepared soil.

EARLIEST SHORT HORN (FOR FORCING).-The earliest variety in cultivation, and best suited for forcing. Tops small, finely divided; root dark or reddish-orange, round. two inches in diameter, with slender tap, and grooved at the crown.
EARLY SCARLET HORN.-Best for early planting out of doors. Tops small, coarsely divided; roots top shaped, but tapering abruptly to a small tap; surface dented, orange-red; flesh thick, with indistinct yellow core.
EARLY HALF LONG SCARLET CARENTAN.Tops very small, roots cylindrical with a remarkably small

neck; very handsome, deep orange in color, with scarcely any core, and of the best quality. They can be sown very thick and are well adapted for forcing.
HALE LONG SCARLET NANTES, STUMP ROOTED.-Tops medium; roots cylindrical, smooth, bright orange; flesh orange, becoming yellow in center, but with no distinct core: of the finest quality. This and the preceding are the varieties so extensively used in France for culinary purposes, and only need to be known to supersede the coarser sorts for garden culture.


Chantenay.
CHANTENAY.-Tops medium size; necks small; roots tapering slightly but uniformly stump rooted and smooth; color deep orange red; flesh very crisp and tender. This is a medium early sort, a heavy cropper, and is undoubtedly one of the best for both the market and private gardener, while its great productiveness makes it very desirable as a field sort.

EARLY|HALE LONG SCARLET, STUMP ROOTED. -Excellent for early market or for field culture on shallow soils. Of medium size, flesh bright scarlet, brittle and of fine flavor.

GUERANDE, OR OX HEART.-Tops small for the size of the root, specimens of which have been grown which were over seven inches across. They are broad, top shaped, the diameter often exceeding the length, and terminate abruptly in a small tap root, and by reason of their shape, very easily dug. Flesh bright orange, fine grained and sweet. Good enough for the table, although large enough to be profitably grown for stock. Although introduced as a late carrot, this has been found very desirable when young for early market.


DANVERS.-One of the most productive and best for field culture. Tops medium; roots dark colored, large, but
of medium length, tapering abruptly at the point, very uniform and handsome; flesh deep orange with yellow center, sweet and tender.
LONG ORANGE.-A well known standard sort. Roots long, thickest near the crown, tapering regularly to a point; color deep orange. It requires a deep soil, and the plants should stand eight inches apart, in eighteen inch drills, for the roots to attain their full size.
IMPROVED LONG ORANGE.An improvement on the preceding, obtained by careful selection for years of the best formed and deepest colored roots. Roots proportionately shorter than the Long Orange, and smoother, but so uniform and true that the bulk of crop will be greater. The most desirable sort for farm use on mellow soils.
LARGE WHITE VOSGES.-Roots very large, similar in shape, although more pointed than the Guerande Skin and flesh white and the latter is of much better quality than that of the other white varieties, so that it is often used for the table. Easily dug, and a very distinct, valuable variety.
D. M. FERRY \& CO'S IMPROVED SHORT WHITE. - This is a new and distinct variety, which is, we think, destined to take first rank as a field carrot, owing to its enormous productiveness and its growing well out of the ground, making it comparatively easy to harvest. Roots short, very heavy at shoulder, regularly tapering to a point, of uniform shape and smooth; color light green, above ground, white below; flesh rich, white, solid and crisp, and of the finest flavor.

D. M. Ferry \& Co:s Improved Short White.

LARGE WHITE BELGIAN.-Grows one-third out of the ground. Root pure white, green above ground, with small top. Flesh rather coarse, but the roots on light, rich ground grow to a large size, and are extensively grown for stock feeding.


## GAULIFLOLNER.

French, Chou-fleur. German, Blumen-Kohl.
The cauliflower, although one of the most delicious of vegetables, is little known outside of our large cities. It needs, to bring it to perfection, a cool, moist atmosphere, and if this condition occurs when the plant is about to head, fine, large heads would result, while if the air is hot and dry, failure will result in spite of the best of seed and cultivation. The seed we offer is the finest procurable, and is obtained from the most careful growers in Europe.

Culture.-For the spring and summer crop, sow the early varieties about the last of winter in a hot-bed, and transplant into the open air as soon as the ground can be worked. For the late, autumn crop, sow the late kinds about the middle of spring, and transplant like winter cabbages. In dry weather water freely, and as they advance in growth, hoe deep and draw earth to the stems. After they begin to head, they should be watered every other day, and the leaves gathered and pinned together over the heads to protect them from the sun and keep them white. On the approach of frost those plants which have not headed may be set out in a cellar, where they can be aired in mild weather. In two or three weeks the strongest will begin to form flower heads, which should be cut for use while the "curd" is close and compact. It is then tender and delicious, but later the head opens, separates into branches, and soon becomes coarse, fibrous, strongly flavored and unfit for use. In cauliflowers very much depends upon the quality of the seed, and we have expended a great deal of time and money to satisfy ourselves where we could obtain the best, and believe the seed we offer this year to be the best in the world. It is the product of very carefully selected heads, and grown in the sections where the best cauliflowers in the world are produced, and consequently is high priced, but we think it really the most economical and best to buy, as every plant with good culture will produce a good head.
FERRY'S EARLY PURITAN.-We have given a great deal of attention to stcuring an extra early. sure heading caulifluwer, and think we have in this strain all the requirements of a first class forcing sort. Plants upright. compact, short stemmed, producing large heads of fine color when properly blanched.

EARLY SNOWBALL.-Highly esteemed by market gardeners for its earliness and reliability as a sure header. Its hardiness, sure heading and compact growth make it one of the best for forcing or wintering over, while it is fully as good for planting for the late crop. Our stock of this is of the best procurable, and will be found fully equal to that offered by anyone, whether in "sealed " packages or not.
EXTRA EARLY DWARF ERFLRT.-An extra early variety, much prized in Germany for early market use. It is of dwarf habit, compact growth, short outside leaves, and can be planted twenty inches apart each way. We think this stock can be entirely relied upon, as the seed is selected with extra care by one of the most careful growers in Germany.

EXTRA EARLY PARIS.-Heads large, white, compact and solid, of excellent flavor, tender and delicious, Leaves large, stock short. Being so early, it must always be a favorite, especially with market gardeners.

EARLY ERFCRT.-One of the best for general cultivation. Heads large, close, compact and very white.

EARLY LONDON.-This is a standard variety; very tender and quite early; heads compact, solid and of delicious flavor; good for general use.

EARLY PARIS, OR NONPAREIL.-A most excellent French variety with good sized, uniform, close heads, which are tender and delicious. Planted at the same time with the Extra Early Paris, it will afford a succession.

LE NORMAND'S SHORT STEM.-Considered by the French one of the very best sorts. Plant hardy, semi-dwarf, sure heading, and producing many leaves, which protect the close, solid curd, keeping it well blanched.

LARGEALGIERS.-A valuable late sort, sure to head. of the best quality, and very popular with market gardeners everywhere. One of the very best.

VEITCH'S ALTCMN GIANT.-A distinct and valuable late variety. The heads are very large, beautifully white. firm and compact, and being well protected by foliage. remain a long time fit for use. The plants shuuld be started and transplanted early in the season, to insure their full development.

## CELERY.

French. C'eleri. German. Sellerie.
This is becoming more and more popular, and whole farms are given up to its production. It delights in a rich, friable, well drained muck soil. but can be grown of excellent quality in any good garden, although an abundance of water while growing, and cool, moist weather when blanching, are essential for good celery.

CLlTtre.-Sow the seed (which is slow to germinate) in shallow boxes, or in a finely prepared seed bed out of doors. in straight rows, so that the small plants may be kept free from weeds. When about two inches high, thin out and transplant so that they may stand two inches apart, and when the plants are four inches high, cut off the tops which will cause them to grow stocky. The crop is usually made to succeed some earlier crop and if good plants are used they may be set out as late as the middle of August. but the best results are usually obtained from setting about the middle of June or first of July. The most desirable time will depend upon local climate, and is that which will bring the plants to maturity during cool, moist weather. In setting, prepare broad, shallow trenches about six inches deep, and four feet apart, in which the plants should be set six inches apart. cutting off the outer leaves and pressing the soil firmly about the roots. When the plants are nearly full grown they should be "handled, "which is done by one man gathering the leares together, while a second draws the earth about the plant to one-third its height, taking care that none of the earth falls between the leares, as it would be likely to cause them to rust or rot. After a few days draw more earth about them and repeat the process every few days until only the tops of the leaves are visible, or the leaves may be pressed teget her by two wide boards held firmly a few inches apart by cross ties and stakes, when in a few days more it will be fit for use. Care should be taken that the plants are not disturbed while they or the ground is wet, as it would be sure to injure them. A part of the crop may be simply "handled" and
then at the approach of severe freezing weather, taken up and set out compactly so that all but the tops of the leaves can be covered with sand, in a light cellar or an unused cold frame, which can be kept just above the freezing point, and it will then gradually blanch so that it may be used throughout the winter.

GOLDEN YELLOW LARGE SOLID.-This is sometimes sold as Golden Self-Blanching, and it is quite as selfblanching as White Plume, or any other kind. The entire plant is of a yellowish-green color, and as it approaches maturity, the inner stems and leaves become a beautiful yellow color, adding much to its beauty, but by no means dispensing with the necessity of blanching. It grows to a good size, is very tender, crisp and solid, and when well grown and blanched, it is of excellent quality and very beautiful. This is certainly the best sort for early planting.


## Golden Yellow Large Solid.

WHITE PLUME.-Introduced with the claim that it was entirely self-blanching and needed no earthing up; but no good celery can be grown without earthing up or some substitute for it. The inner leaves are white and the blanched celery is quite handsome and attractive, and it comes to maturity earlier than most sorts. We think it is not superior in any particular to the Golden Yellow Large Solid, and inferior both in quality and beauty.

GOLDEN HEART.-A distinct variety of sturdy dwarf habit. It is solid, an excellent keeper, and of fine nutty flavor. When blanched, the heart, which is large and full, is of a light yellow, making this an exceedingly showy and desirable variety for both market and private use. Most of the extensive cultivators after trying other varieties return to this for their general crop.

BOSTON MARKET.-For many years one of the most popular sorts in the markets of Boston. It forms a cluster of heads instead of a single large one, and is remarkably tender and crisp. The best variety for light soils.

DWARF WHITE SOLID.-Dwarf white, of stiff, close habit; solid, crisp and juicy. Said to keep in good order later in the season than any other variety.

CRAWFORD'S HALF DWARF.-The favorite variety with New York city market gardeners. When blanched it is of rather a yellowish-white, and is entirely solid, possessing the nutty flavor peculiar to the dwarf kinds, while it has much more vigor of growth, surpassing most of the large growing sorts in weight of bunch.

GIANT PASCAL.-This is perhaps the best celery for general crop ever introduced. Developed from the Golden Yellow Large Solid, it retains the beautiful color when blanched, the thick, solid, erisp stalks, and the incomparable
flavor of that variety, and in addition is much stronger growing and larger, making perfectly blanched stalks fully two feet in length. It blanches perfectly in a very few days;

is a fine keeper and shipper, retaining its color and fresh appearance a long time. Owing to its fine keeping qualities, this should be planted to follow Golden Yellow Large Solid.

PERFECTION HEARTWELL.-The best flavored, most crisp and tender of the white varieties. The plants are a little taller than the Crawford's Half Dwarf, and a little later in maturing. The stalks are medium sized, round, very solid, crisp and tender, and of exceedingly fine and nutty flavor.

SEYMOUR'S WHITE SOLID.-A large sized, vigorous growing variety; stalks white, round, very crisp, perfectly solid, and of superior flavor.
INCOMPARABLE DWARF CRIMSON. - The red varieties keep better through the winter, and are generally considered to be of superior flavor, and they are yearly becoming more popular. This is a dwarf sort, of deep, rich color, very crisp and of the highest flavor.

CELERIAC, OR TURNIP ROOTED.-The root of this variety is turnip shaped, tender and marrow like, having a sweeter taste and stronger odor than other varieties. It is used principally for seasoning meats and soups.

CELERIAC, LARGE SMOOTH PRAGUE.-An improved form of turnip rooted celery, producing large and smooth roots, which are almost round, and with very few side roots. Plants vigorous, with large, deep green foliage.


Celeriac, large Smooth Prague.

## CHERVIL.

French, Cerfeuil. German, Gartenkerbel. By many this is preferred to parsley for garnishing, and its aromatic leaves are much used for seasoning and in salads.


Culture.-Sow in early spring in rich, well prepared sandy soil, and when plants are well established, transplant to about one foot apart.
CURLED.-A variety with crisp and curled leaves, and very much handsomer, and in all respects superior to the common sort

## CHICORY.

## French, Chicoree. German, Cigorien.

LARGE ROOTED, OR COFFEE.-Much used in Europe as a substitute for coffee, and large quantities of the prepared root are annually exported to this country for similar use. Sow as early in the spring as the ground can be prepared, in rich, friable soil, in drills eighteen inches apart in garden, and two and one-half feet apart in field culture. Cultivate well and thin the young plants to about eight or ten to a foot. In the fall, dig the roots and cut into small pieces and dry like dried apples.

## C○LLARDS.

A species of cabbage known in different sections as "Cole" and "Colewnrt." It is almost universally used in the South for "greens," where it continues in luxuriant growth all winter.
GEORGIA, SOUTHERN, OR CREOLE.-This is the variety so extensively used in the South, where it furnishes an abundance of food for both man and beast. Forms a large, loose, open head, or a mass of leaves on a tall stem. r'reezing improves their quality. Sow thick, in drills, in rich ground, transplanting when four inches high. In the South, sow from January to May and August to October.

## $C \odot R N, B R \odot O T K$.

There are many farmers who might make this a very profitable crop, as an acre will give about five hundred waight of broom and nearly forty bushels of seed, worth abut as much as oats for feed.

Culture.-It should be planted a few days later than corn, but requires similar soil and culture. It is frequently planted in drills three and a-half feet apari, leaving the plants six inches apart.

DWARF.-Grows from three to five feet high, and produces short, fine brush, suitable for whisk brooms and brushes. Our stock is very pure and true.

IMPROVED EVERGREEN.-Grows to a height of seven to nine feet; early and produces a very fine brush of good length and of green color. Our stock is choice, having been established by a careful selection for many years of the finest plants.

## Corn Salad, Fetticus. or Latibis Lettuce.

French, Mache, Salade de ble. German, Ackersalat, Lammarsalat.
This small salad is used during the winter and spring months as a substitute for lettuce, and is also cooked and used like spinage. In warm weather the plants will mature in from four to six weeks.

Culture.-Sow the seed in shallow drills about one foot apart, during August and September. If the soil is dry, it
should be firmly pressed over the seed in order to secure prompt germination. On the approach of sererely cold

weather, cover with straw or coarse litter. The plants will also do well if the seed is sown very early in the spring, and like most salad plants, are greatly improved if grown on very rich soil; indeed, the ground can scarcely be made too rich for them.

## CRESS.

French, Cresson. German, Kresse.
CURLED, OR PEPPER GRASS.- This small salad was formerly much used with lettuce, to which its warm, pungent taste makes a most agreeable addition.

Culture of the Curled Varieties.-The seed should be sown in drills about eighteen inches apart, on very rich ground, and the plants well cultivated. Keep off insects by dusting with Pyrethrum Powder. It may be planted very early, but repeated sowings are necessary to secure a succession.

WATER.-This is quite distinct from the last, and only thrives when its roots and stems are submerged in water. It is one of the most delicious of small salads and should be planted wherever a suitable place can be found.


Culture.-The seed should be sown and lightly covered, in gravelly, mucky lands along the borders of small, rapid streams, and the plants will need no subsequent culture, as under favorable conditions they increase very rapidly by selfsown seed and extension of the roots.

## CORN.

French, Mais. German, Mais.
Culture.-A rich, warm, alluvial soil is best, and immediately before planting this should be as deeply and thoroughly worked as possible. Cultivate deeply and thoroughly as soon as possible after the plants appear, and every few days until it tassels. Thorough cultivation and a warm, rich soil are the keys to success.
CORY.-A new sort resembling the Marblehead, but of stronger growth, with larger, lighter colored ears, and by far the largest of the early sorts. The plant does not sucker so much as the Marblehead, and it will mature a full crop earlier than that variety. All the red cobbed corns should be cooked quickly by dropping the ears into boiling water to which a little sait has been added. for if simmered over a slow fire, or allowed to stand in the water after cooking, the red cob will discolor the kernels.

EARLY MARELEHEAD.-Stalk very short, with many suckers from the root; ears medium sized, eight rowed, with few husks; cob red, small: kernel broad, shallow, white or tinged with red. Formerly considered the earliest sort, but clearly later than the Cory
WHITE COB MARBLEHEAD.-A selection of the Marblehead, of the same character in all respects except that it has a white cob. Although we have carefully selected the stock for many years, still an occasional red cob will appear.
BOYNTON.-Introduced by us in 18\%\%, and for many years recognized as the best extra early sort, but unfortun

ately we lost the true stock, and have been unable to offer it for some years. We have now a stock fully equal to that first sent out, and recommend it as the earliest white cob sweet corn. Stalk short, without suckers; ears eight rowed, similar to the Minnesota, and of the best quality of any of the extra early sorts.

EXTRA EARLY ADAMS.-Nearly as early as the last, but inferior in quality. It will, however, succeed in the South where other sorts fail. Stalks very short, with no suckers, bearing a single, very full, round, short ear, well covered with husks: kernels white, smooth.

EARLY MINVESOTA. - Very little later than the above, but an old and deservedly popular market sort. Stalks short and not suckering, bearing one or two ears well covered with husks; ears long, eight rowed; kernels very broad, sweet and tender, not shrinking much in drying. By careful selection we have developed a stock of this standard variety which is remarkably uniform, and in which all the good qualities which have made this variety so popular are intensified.
CROSBI'S EARLY.-A most excellent variety, and remarkably early. Ears of good size, twelve rowed, of medium length: grain very thick, sweet, rich and delicate. This is the sort grown in Maine, and it is the use of this variety rather than any peculiarity of soil that has given Maine sweet corn its reputation for quality
LEET'S EARLY.-The earliest large eared corn. Stalk a little taller than the Minnesota, generally red; ears larger, generally ten rowed, but sometimes with only eight; usually white cob, but occasionally red. This is a very desirable corn for those markets where an early, large eared corn is wanted. Quality is quite uniformly good. This variety took the first premium at the great Corn Show in Chicago in $188 \%$ as the best early sweet corn.
PEE AND KAY.-This has proved a very popular variety, particularly in the East. Stalks of medium height, bearing two straight, handsome, ten or twelve rowed ears, which are very large for so early a variety. They mature about with Minnesota and are of good quality, cooking very white and tender.
EARLY SOUTHERN SWEET.-This is a true hybrid corn, being the result of a crossing of the Minnesota on the Cuzco, a Mexican species with very tall stalks and short, thick ear, bearing grains as large as chestnuts. We made the cross in 1882, and have been selecting and fixing the sort since. Stalks about the height of Minnesota, very stiff, with broad, stiff foliage, and bearing medium length ten rowed ears covered with thick coarse husks. Grain large, with a thick skin, but sweet and good. The ears are fit for use about as soon as the Minnesota, and remain in condition until late in the fall. From tests we have made, we believe that this corn can be grown successfully in the extreme South, where all other sweet corns fail.
PERRY'SHYBRID.-Another eastern and very popular variety. Stalks of medium height, very stout, bearing two large, twelve or fourteen rowed ears, which often have a red or pink cob; grain medium size, cooking very white and tender. Matures about with the Minnesota.
EARLY SWEET OR SUGAR.-Ears of good size, eight rowed, tender and sugary; plant productive, hardy and quite early. An excellent table sort.

MOORE'S EARLY CONCORD.-Produces its very large, handsome, fourteen rowed ears very low on the stalk, and comes into use after Crosby's Early. The quality is faultless, and it is valuable as an intermediate variety.

BLACK MEXICAN,-Although the ripe grain is black, or bluish-black, the corn, when in condition for the table, cooks remarkably white, and is surpassed by none in tenderness. This, by many is considered the most desirable for family use of the second early sorts.
EXCELSIOR.-The best quality of the second early sorts, and the best for general crop. Stalks medium, bearing from three to six small, curved ears, which are filled out to the end with broad, white kernels that cook exceedingly sweet and tender.
OLD COLONY. - A very old sort which has been revived and sold under the name of Landreth's Sugar and other names. Stalks six feet high; very productive; ear large, oval, with sixteen to twenty irregular rows; grain small, long, compressed and crowded on the white cob; quality the very best.
EGYPTIAN SWEET. - A variety noted for its productiveness, the stalks having from two to four ears each, the large size of its ears, its sweetness and tenderness. It is peculiarly adapted for canning purposes, and the superiority of the canned green corn of this variety is noticeable.
HICKOX HYBRID.-A very popular variety in the East. Ears longer than the Evergreen, but not quite so large grain very white and retains this color when cooked, and until quite mature. A very desirable sort for canners who wish a late corn.
STOWELL'S EVERGREEN SWEET.-This variety is intermediate in its season, and if planted at the same time with earlier kinds, will keep the table supplied until October. It is hardy and productive, very tender and sugary, remaining a long time in condition suitable for boiling. Our stock
has been carefully grown and selected to avoid the tendency to a shorter grain and deterioration in the Evergreen character of this best of all late sorts.

MAMMOTH SWEET. - This variety produces "the largest ears of any sort with which we are acquainted, a single ear sometimes weighing two or three pounds. It is of excellent quality, sweet, tender and delicious, and its only fault is the immense size of the ear

EARLY ADAMS, OR BERLINGTON:-An excellent early field variety, and often used for table, particularly in rowed; kernels white, rounded, somewhat deeper than broad, and indented at the outer end, which is whiter and less transparent than the inner.

EARLY RED BLAZED. - The experience of 1883 demonstrated that this is the hardiest field corn in cultivation. It is not only early, but will endure uninjured a degree of cold and wet that would be fatal to other sorts. Stalks medium height, without suckers, dark green with red or bronze markings. Leaves broad, green at base, but bronze at top, particularly while the plant is young. Ears long, eight rowed, well filled, small at base. Grain flinty and of fine quality, bright yellow at base of ears, but red at the tips.

EARLY GOLDEN DENT, OR PRIDE OF THE NORTH.-A very early Dent variety, ripening with the Flint sorts, and can be successfully grown further north than any other variety of Dent corn. Stalks small, with broad Grain long, yellow, making an extra quality of meal.

EARLYGOLDEN LENAWEE DENT.-Plant medium sized, stout, with very broad leaves, producing two ears, which are large, cylindrical, sixteen or eighteen rowed. with very deep yellow grain and an exceedingly small cob. It matures very early and surely, and has repeatedly made a crop when other sorts failed.
EARLY YELLOW HATHAWAY DENT. - Stalks above medium, stout, with many broad leaves and bearing two ears on long foot stalks so that they hang point downwards, thus protecting the grain from rain. Ears medium sized, with very small cob, especially at the base; sixteen to twenty rowed, grain yellow, dented with small, projecting point, very long, and wedge shaped.

ENSILAGE.-Many people think that any variety of corn will do for ensilage or fodder. This is only partially true; some varieties are much better for this purpose, giving a larger proportion and better quality of fodder. What we offer is especially valuable and will give an immense yield of fodder of the best quality

RICE, FOR PARCHING.-A very handsome variety Ears short; kernels long. pointed and resemble rice; color white; very prolific; used entirely for parching, for which purpose it has no superior.

## GUCUTKBER.

French, Concombre. German, Gurken.
This is one of those vegetables which can be grown to perfection by anyone who can control a few square yards of soil which is fully exposed to the sun, and the fruit is so much better when gathered fresh from the vines than it is when obtained in the market, that every family should be supplied from its own yard.
Culture. - The plants are tender, and planting should be delayed until settled warm weather, or ample facilities should be provided for protecting them from frosts and during cold storms. Form low, flat hills six feet apart each way, of rich soil, by mixing in a quantity of thoroughly decomposed manure, stirring the soil to a depth of sixteen inches or more; or open shallow trenches six to eight feet apart and mix with the bottom earth a quantity of similar manure and replace the surface soil. Scatter on each hill fifteen or twenty seeds, or one every inch along the rows, and cover one inch deep, pressing the soil firmly over them.

As soon as the plants are up they will be liable to attack by the striped cucumber beetle. These may be kept off by frequent dusting with air-slaked lime, soot, or sifted ashes diluted with fine road earth: care should be taken not to use too much, for if too strong any of the above materials will kill the vines. We have found the following mixture quite effectual: Take unslaked lime, add enough water to slake; when it begins to steam sprinkle over it Howers of sulphur at the rate of one-half lb . per bushel of lime: cover and watch that the sulphur does not take fire-if it should. add a little water; when the lime is thoroughly slaked mix well and apply by dusting on the leaves rather sparingly. This mixture should be used while fresh. When the plants are well established, thin to three plants to each hill. In gathering, pick all the fruit before it begins to ripen, as the vines will cease setting fruit as soon as any seed commences to mature. In field culture, plow furrows four feet apart across the field, and similar ones, but omitting every fourth furrow, at right angles to the first; this will form paths for the distribution of manure and the gathering of the fruit. At each intersection drop a shovelful or more of well rotted manure. which should be well mixed with the soil. so as to form a low, flat hill. In gathering for pickles cut the stem, instead of pulling the fruit off, and be careful not to mar the fruit in any way, for if the skin is broken the piekles will not keep.

EARLY RUSSIAN.-Earliest and hardiest. Vines vigorous and productive. Fruit three to four inches long, small, oval, pointed at each end, covered with fine small spines.
EARLY CLUSTER.-Vines vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, holding full size to each end, dark green, but paler at blossom end. Good for table use, but not adapted to pickling.


## Early Shomt Green, or Eamly Frame.

EARLY SHORT GREEN, OR EARLY FRAME.Plants very vigorous and productive. Fruit straight, handsome, smaller at each end, bright green, lighter at the blossom end, with crisp, tender flesh, and when young makes excellent pickes.
There are a number of different strains of pickling cucumbers, each of which has distinct merit and is popular in some section. We offer carefully grown stocks of the following:


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Cmicago Pickling.
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CHICAGO, OR WESTERELELD PICKLING.-Very popular with Chicago market gardeners, and extensively grown in that vicinity. Fruit medium length, pointed at each end, with very large and prominent spines; color deep green.
JERSEY PICKLING.-Very popular in New Jersey. Intermediate between the Long and Short Green, forming a long, slender, cylindrical pickle, which is very crisp and tender.


## Jemsey Pickling.

D. M. FERRY \& CO'S PERFECTION PICKLING.This variety is not only the best for pickles, but is one of the best for the table. Vines vigorous, producing their fruit early and very abundantly; fruit distinctly three sided, tapering towards each end, of dark green color, which they retain as pickles; flesh very crisp and tender.

D. M. Ferry \& Cós Perfection Pickling.

BOSTON PICKLING, OR GREEN PROLIFIC.-A distinct variety very popular for pickles. Fruit short, nearly cylindrical, but pointed at each end, bright green and a great producer.


PARISIAN PROLIFIC PICKLING.-This is a new French sort. The fruit is very long, slender, cylindrical, densely covered with fine prickles, and deep, rich green in color. The flesh is very crisp and tender, making it one of the best for slicing as well as for pickles. The vine produces its fruit in clusters, and is enormously productive. This should receive universal trial.
NICHOLS' MEDIUM GREEN. - A new variety, the result of careful selection. Fruit of medium length, nearly cylindrical, very uniform in shape, and of good color when young, but becomes vellow and bitter at an earlier stage than most, and is not at all suited for forcing or early planting.


## Nichols: Medium Green

EARLY WHITE SPINE.-One of the best sorts for table use. Vines vigorous, fruiting early and abundantly; fruit uniformly straight and handsome, light green with a few white spines; flesh tender and of excellent flavor. In this country, this variety is used more, perhaps, than any other for forcing under glass.
ARLINGTON.-A selection from the White Spine, being more pointed at each end. The young fruits are unusually crisp and tender, and are of a very dark green color, so that the variety is considered by many to be the best for small pickles.
BISMARCK.-A cross between the White Spine and Long Green; established by careful selection. Fruit long, cylindrical, very handsome and constant in form and color; flesb very crisp and tender.


Improved Long Green.

IMPROVED LONG GREEN.-Produced by selection from the Long Green Vines vigorous and productive, forming fruit fit for the table nearly as early as the shorter sorts; fruit about $t w e l v e$ inches long, firm and crisp, with very few seeds. The young fruit makes one of the best of pickles, and when ripe is the best of any for sweet pickles.
GHERKIN, FOR PICKLING.-A very small, oval, prickly variety, quite distinct from all others. It is grown exclusively for pickling; is the smallest of all the varieties, and should always be picked when young and tender. The seed is slow to germinate, requiring usually from two to three weeks.

## EGG PLANT.

French, Aubergine. German, Eierpflanze.
The Egg Plant, when well grown and properly cooked, is a delicious vegetable, and it should find a place in every garden. Culture.- The seed germinates slowly, and should be started in strong heat, for in this, as in all sub-tropical plants, it is of importance to secure a rapid and continuous growth from the first, the plants never recovering from a check received when young. When the plants have formed two rough leaves, transplant to three or four inches apart. Keep the bed closed and very warm, shading from the direct rays of the sun, and giving abundance of water until the ground is warm and all danger, not only from frost, but from cold nights, is past; then harden off the plants by gradual exposure to the sun and air, and decrease the supply of water, then carefully transplant into very warm, rich soil, setting the plants two and a-half feet apart. If needed, shade the young plants and protect them from the potato bug, which is very fond of them, and if not prevented will often destroy them
EARLY LONG PCRPLE.-This is one of the earliest and most productive varieties; fruit long, dark, rich purple, and of fine quality.

BLACK PEKIN.-Nearly as early as the last, and nearly as large as the later sorts. Very prolific, and desirable for market gardeners' use. Fruit nearly round; skin smooth, black and glossy; flesh white, fine grained and delicate.
LARGE NEW YORK PURPLE.-Large, round or oval, of excellent quality; later than the preceding and highly esteemed in the New York market.

D. M. Femay \& Co's Improved Large Pubple.
D. M. FERRY \& CO'S IMPROVEI LARGE PUR-PLE.-The best variety in cultivation, being early, a sure cropper, and of fine quality. Plants large, vigorous, with light green leaves; fruit very large, oval, deep purple, with occasional dash of green about the stem; flesh white, tender and of superior quality.

## ENDIVE.

French. Chicoree. German. Endivien.
Endive in its natural state is very bitter, but when properly blanched its leaves make a fine salad, and maturing as it does after lettuce is past, it is very useful.

Culture.-Endive may be grown at any season of the year, but is more generally used late in the fall. Sow the seed during June or July, in drills fourteen inches apart, and when well established thin the plants to one foot apart. When nearly full grown, tie the outer leaves together over the centre in order to blanch the heart of the plant. This will usually be fit for the table in ten days, and continues in condition for use about one week, so that the tying up should be done every few days in order to secure a succession.

GREEN CURLED.-Is the hardiest variety, with beautifully curled, dark green leaves, which blanch white, and are very crisp and tender.


Ever White Cumled.
EVER WHITE CURLED.-By far the most beautiful variety. Plant moderately dense with divided leaves, which are coarser and less tender than those of the Green Curled; but the midrib is yellow and the leaves frequently almost white, so that the plant is very attractive and always brings the highest price on the market.

BROAD LEAVED BATAVIAN.-Has broad, thick, plain or slightly wrinkled leaves, forming a large head which is preferred for stews and soups; but if the outer leaves are gathered and tied at the top, the whole plant will blanch nicely, and make an excellent salad for the table.

## GARLIC.

French, Ail. German, Knoblauch.
A bulbous rooted plant, with a strong, penetrating odor, but much esteemed by some for flavoring soups, stews, etc. We frequently receive orders for garlic seed, but we can supply the bulbs only.

Culture.-Prepare the ground the same as for onions, and plant the bulbs in drills eight inches apart, and four inches apart in the rows and cover two inches deep. When the leaves turn yellow, take up the bulbs and dry in the shade, and lay them up in a dry loft, as you would onions.

## GOURD.

Culture. - The Gourd is a tender annual, and should not be planted until all danger of frost is over, and not less than six feet apart each way, in good, rich loam. Three plants in a hill will be sufficient to leave at the last hoeing.

SUGAR TROUGH. - This variety grows to a very large size, and is valuable, when dry, for a variety of bousehold purposes, such as baskets, buckets, cans, etc.

JAPANESE NEST EGG.-The fruit of this plant resembles an egg in size and appearance. They are pure white, do not crack, are not injured by heat or cold, and so make the very best nest eggs.
For Ornamental Varieties, see Flower Seeds.

## H○RSE RADISH.

The best Horse Radish is produced from small pieces of root; these are to be set small end down so that the top will be two inches below the surface. The soil should be very rich and well cultivated. It is also grown, but of inferior quality, from the crowns of the old plants. It is hardy and may be left in the ground until spring before digging. We frequently receive orders for the seed of this vegetable, but we can supply the roots only.

## KALE.

French, Chou Vert. German, Blaetter Kohl.
Borecole, Kale, or German Greens, are general terms applied to those classes of cabbage which do not form heads, but are used in their open growth. Some of the varieties are the most tender and delicate of any of the cabbage tribe. They are hardy, and improved rather than injured by the frost.
Culture.-As far north as New York they may be sown in September and treated like spinage, although in the South they will live and grow throughout the winter without protection, or they may be planted and treated like winter cabbage, and will continue growing till very late. If cut when frozen, thaw out in cold water before boiling.


TALL GREEN CURLED SCOTCH.-This is very hardy, and improved by a moderate frost. About two feet high, with an abundance of dark green, curled and wrinkled leaves. It stands the winters in the Middle States without any protection.
HALF DWARF MOSS CURLED.-An intermediate form which seems to possess all the merits of both the tall and dwarf sorts. It forms a medium sized head of nicely

curled leaves, which are kept well off the ground, but at the same time so compact as not to suffer from frost.
GERMAN DWARF PURPLE.-A dwarf, compact plant composed of a mass of large, finely frilled leaves of a deep purple color. Tender and of excellent quality; so handsome that it is frequently grown for ornament.
EXTRA CURLED GERMAN DWARE GREEN.Plant dwarf, compact. Leaves numerous, long, of deep bright green color, and a mass of frilling, so that often they are as thick as wide, and are of the best quality.
GERMAN DWARF GREEN.-A smooth leaved sort very popular in the South, where, if sown in the fall, it needs no protection, growing vigorously all winter; but is not equal to the other sorts for use in the North.

## KOHL RABI.

## French, Chou-rave. German, Kohl-Rabi.

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


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

EARLY WHITE VIENNA.-Very early, small, handsome, white bulb. Best early variety for table.
EARLY PURPLE VIENNA.- Nearly identical with the last except in color, which is a bright purple, with the leaf stems tinged with purple.
LARGE GREEN.-Hardy, quite late, and used for feeding stock. Bulbs large, weighing eight to ten pounds, whit-ish-green in color; leaves large and numerous.

## LEEK.

French, Poireau. German, Lauch.
This is a branch of the onion family, is very hardy, and by some is preferred to the onion.
Culture. - Dig trenches eight inches deep, and make the soil at the bottom fine and rich (it can scarcely be made too rich). Sow the seed early in the spring, and cover lightly with earth. Thin to six inches apart, and when the plants are twelve inches high, gather the leaves together and fill the trench so as to blanch the lower part of the plant. Dig and store in the cellar or out of doors, like celery, before severe weather.

LONDON FLAG-Is the variety more cultivated in this country than any other. It is hardy and of good quality.


Leek.

## LETTUCE.

## French, Laitue. German, Lattich-salat.

There is no vegetable which is more universally used than this, and yet few people know how inviting and appetizing it is when brought to the table fresh and unwilted, a condition in which it is rarely, if ever, found in our markets, and which can only be secured by growing the plants in one's own garden. So we earnestly urge all of our readers who can possibly do so, to grow their own lettuce.

Ctltcre. - The quality of lettuce depends largely upon rapid and vigorous growth, and to secure this we need very rich, mellow soil, frequent surface cultivation, and an abundant supply of water. For the earliest crop, sow under glass in March, and thin out the plants so as to prevent their becoming crowded. If it is intended to mature the plants under glass, keep the bed quite close, giving frequent and abundant watering with liquid manure, and shade during very sunny days; if the plants are to be set in the open ground. give all the air possible without freezing the plant, and "harden off " by full exposure and withdrawal of water before transplanting. The plants should be set out as soon as a warm spot can be made very rich and mellow. At the time the plants are set out, sow seed in drills fourteen inches apart. and thin out as wanted for the table until they stand eighteen inches apart. Give frequent hoeings, and if possible water during any dry time. The cos varieties should be tied up seven to ten days before using, in order to blanch the inner leaves.
During the past few years we have had under cultivation and critical comparison hundreds of European and American varieties, including Oak-leared, Perpetual, New York, Deacon, Satisfaction, etc.. etc., and as a result present the following list as including the best of every valuable type.

EARLY TENXIS BALL. (BLACK SEEDED).-Where a thick and dark leaved head lettuce for forcing is desired this is the best for culture under glass, but it must have a low temperature and plenty of air. Plant small, very hardy, forming when well grown a compact round head, but if planted so as to mature during warm weather, it forms a loose and open head, or none at all, and runs quickly to seed. Leaves thick, crisp and tender, and blanch easily and finely.

GRAND RAPIDS.-Considered by many the best loose headed lettuce for forcing under glass. Leaves medium size, of light, yellowish-green color, much crimped and frilled. thin, but of very upright growth; forms a fair sized but loose head: crisp, tender and of good quality. Owing to its upright habit it may be planted very closely. It is of extremely rapid growth; very little liable to rot; will stand, without spoiling, a week to ten days after it is fit to cut, and retains its freshness a long time after cutting. These qualities have enabled the market gardeners about Grand Rapids, Mich., to ship this lettuce to Cincinnati and New York, and dispose of it at profitable figures over all competitors. Our stock is true, being grown from seed obtained directly from the originator.

HCBBARD'S MARKET.-A white seeded variety, very similar to the Black Seeded Tennis Ball. It is not quite so early to mature. but forms a little larger and more open head. Very popular in Boston and other eastern markets.

BLACK SEEDED SIMPSON.-For those who like a large. thin, exceedingly tender leaf, and for those markets which demand a large, loose head, this is the best variety either for forcing or early sowing out of doors. Plant large, forming a large, loose head: very light yellowish-green in color, so that a little wilting is not noticed. Leaves very large, thin, slightly ruffled and blistered, the inner ones


Simpson's Early Curled. nicely blanched, and even the large outside leaves are tender and of good quality. By far the most popular variety in Detroit markets, and one of the best for general market garden use, as it is very attractive, of excellent quality, and continues a long time in condition for use.
SIMPSON'S EARLY CURLED.-Similar to the last, but the plant is a little smaller and decidedly darker in color and the leaves are more frilled and blistered. Popular in New York markets.
EARLY CCRLED SILESIA.-Although this does not come to maturity any sooner than many others, the young plants when sown out of doors can be cut as bunch lettuce the earliest of any, and the leaves are thin and when full grown the sweetest of any. Plant above medium size, bright green in color, growing very erect, but without forming a distinct head. Leaves much longer than wide, and usually cupped like those of the Cos varieties, frilled at the edge and rery sweet and tender.

FERRY'S EARLY PRIZE HEAD.- Careful comparison for several years with scores of varieties of American and foreign lettuces convinces us that this is by far the best
variety for those who like a thin, tender, sweet lettuce; but it is so tender that it is very difficult to market it in goond condition. and so has no place in market gardens unless it can be delivered directly to the consumer. Plant large, deep


Ferry's Early Prize Head.
green, so washed with red as often to appear more red than green; forming a head of a dense mass of leaves rather than one like a cabbage, and very slow to run to seed; leaves large, nearly round, frilled at the edge and densely blistered. They are exceedingly crisp, tender and good flavored, and do not become bitter nearly as early as those of other varieties.

HANSON.-This is the best heading lettuce grown, and furnishes the best blanched leaves, fully equaling those of the Cos varieties. Unfortunately a great deal of spurious and inferior stock has been sold. thus diminishing its popularity, but when pure it cannot fail to give satisfaction, and we think we have perfectly pure and true stock. Plant

large, forming a large, flat head resembling that of a cabbage, and so slow to run to seed that it often fails to form any seed stalk. Outer leaves bright green, with prominent, light colored veins, inner leaves white and usually curved and twisted at the base, very tender and sweet.
PHILADELPHIA BLTTER, OR EARLY WHITE HEAD.-Many prefer a thick leaved, smooth lettuce, and to meet this demand we present this sort. Plant dark green, with many nearly round, thick leaves formed into a very solid, round head, which stands a long time without running to seed. Leaves very thick, folded or puckered at the base, the inner ones blanched to a rich yellow color, and exceedingly rich and nutty in flavor

FRANKFORT HEAD.- The best light colored, smooth, thick leaved head lettuce. Plant light. bright green, with many broad, smooth leaves, nearly all of which are gathered into a dense. round head, which is slow to run to seed. Leaves very thick, the inner ones blanched to a light yellow, tender and of a rich flavor.


BUTTERCCP.-A new German variety recently introduced. Plant medium sized, with numerous round, smooth
leaves, which are of a beautiful yellow color, and very sweet and tender. The plants are vigorous, but do not run to seed until very late, remaining in condition for use the longest of any variety we have tested.

DEACON.-We think that gardeners make a mistake in growing too exclusively the large, thin leaved lettuces of the Simpson type, as the thick leaved heading sorts, when well grown are very much superior in flavor. This is one of the best heading lettuces, forming a large, dense head, well blanched to a rich yellow color, and very thick and fine flavored. We are sure that, when once known, this will be one of the most popular varieties in cultivation.


Deacon.
LARGE DRUMHEAD, OR VICTORIA CABBAGE. -The largest of the heading lettuces. Plant very large, forming an immense, loose head, bright green without and light green or white within. Leaves very large, strongly veined, coarse; but the inner ones are very crisp and tender.
BROWN DUTCH.-An old sort, noted for its hardiness. Leaves large, thick, green, tinged with brown. It always forms a large, solid head, which is somewhat coarse looking, but the inner leaves are beautifully blanched, exceedingly sweet, tender and well flavored. Desirable because of its hardiness and fine quality.
EARLY BOSTON CURLED.-One of the most beautiful varieties in cultivation. Plant medium in size, deep, rich green in color, with many broad leaves which are so deeply frilled that the plant looks like a bunch of moss. When young the leaves are of good quality, but they soon become bitter and the plant quickly runs to seed.

GREEN FRINGED.-An exceedingly ornamental variety. The inside of the leaves is white, the edges a delicate green and beautifully fringed and crimped, making this the most beautiful variety on our list, and well worthy of cultivation for table decoration, although the quality is not the very best.
The Cos lettuces are distinct from the preceding sorts, in having long, narrow, spoon shaped leaves, which usually fold into loose sugar loaf shaped heads, which blanch better by having the outer leaves drawn about them and tied. They are justly celebrated throughout Europe on account of their exceeding crispness, tenderness and delicate flavor, and are becoming more and more popular in this country as they become better known.

EARLY WHITE SELF-FOLDING COS.-A new and distinct Cos lettuce which does not need tying up. The leaves are yellowish-white in color, long, narrow, upright, folding into a solid head like that of an Early York cabbage. This is a truly self-blanching lettuce; is very crisp and tender, and of superior flavor.

## 7M R RTYNIA.

A strong growing, hardy, annual plant, with curious shaped seed pods, which, when young and tender, are highly prized for pickling. The pods are produced in great abundance, and should be gathered when about half grown; after the hardening of the flesh they are worthless.
PROBOSCIDEA.-The common variety. Sow in rich, warm soil after corn is well up, in drills three feet apart, and thin the plants out to two feet in the row.

## TMELON, TVUSKK.

French, Melon. German, Zucker-Melone.
The Musk Melon is too universally popular to need any special description.

Culture.-Cultivate as recommended for cucumbers, except that the hills should be six feet apart, but avoid planting near those plants, as they will mix with and injure the quality of the melons; this and heavy rains at the time of ripening will destroy the flavor of the finest stock. Rich earth for the young plants is far better than manure, but if the latter must be used, see that it is well rotted. If the plants grow very rank, more and finer fruit will be secured by pinching off the ends of the shoots when about three feet long.

JENNY KIND.-The earliest green fleshed melon, and we think the sweetest variety in cultivation. Quite small, round, much flattened at the ends, ribbed, finely netted. Flesh green and very sweet, but not high flavored.
SKILLMAN'S FINE NETTED.A very early melon of small size, varying in shape from almost oval to a flattened globe. Skin green until the fruit is over
ripe, when it be-
 comes yellow, covered with fine netting. Flesh light green, very thick, sweet and of moderately high flavor.
SMALL GREEN NUTMEG.-Fruit of medium size, slightly ribbed, globular. Skin dark green, becoming yellow when over ripe, and nearly covered with broad, shallow netting. Flesh green, very thick, a little coarse, but of fine flavor.

BALTIMORE, OR ACME.-Fruit medium in size, oval, drawn to a point at stem, and slightly ribbed, covered when ripe with coarse netting. Flesh thick. green, very fine flavored and sweet. We think this one of the most uniformly good melons we have on our list-indeed, we have never seen a poor flavored melon of this variety.

## EARLY WHITE JA-

 PAN.-An old variety, but of very fine quality. Fruit oval, white, with green flesh. One of the best for the home garden.

Small Green Nutmeg.


Early White Japan.

IMPROVED GREEN FLESHED CANTALOUPE.Fruit above medium size, oval, moderately ribbed, skin very dark green, partially covered with coarse netting. Flesh very thick, sweet, and of fine quality.
IMPROVED LARGE GREEN NUTMEG.-We think we have by careful selection and growing, secured in this a variety of the largest size, but having all the good qualities of the old Green Nutmeg. We consider this the best variety in cultivation for family use. Vines vigorous, hardy, productive; fruit very large, round, slightly flattened at both ends, ribbed, covered with coarse netting; flesh very thick, green, and of the highest flavor.


Improved Large Green Nutmeg.

HACKENSACK, OR TURK'S CAP.-We have been willing to offer this as a distinct variety, for although we have tested a great many stocks we could find none which were of uniform type, but we have at last, by careful selecwere secured a stock which is pure and true. Fruit of the tion, secured a sch flattened, with large, irregular and deep largest size, much flatearse netting: flesh thick, coarse, of deep green color, and of the finest flavor.


MONTREAL.-Our stock of this variety, unlike most that is offered, is of distinct and uniform type. Fruit of the largest size, often measuring twelve to fourteen inches in diameter; spherical, or slightly oval in shape, with regular, shallow ribs, and sparsely covered with netting; flesh firm, light green, sweet and of excellent flavor.
PINE APPLE.-Vines very productive and hardy. Fruit oval, tapering to stem, medium sized, slight ribs and dark green at first, but becoming covered with shallow gray netting. Flesh green, very thick, soft, delicate and exceedingly sweet and high flavored. One of the best of all the melons for home use.

BAY VIEW.-Fruit large, often sixteen to eighteen inches long, and will ripen up finely if picked quite green, making it one of the best for shipping long distances, and this, combined with its great beauty, makes the variety a favorite with market gardeners. Flesh thick, of rich green color, juicy and very sweet and rich.

CASABA, OR GREEN PERSIAN.-One of the largest and best musk melons in cultivation. Fruit long, oval, a little pointed at each end; flesh green, very sweet, melting and delicious.

## RED OR YELLOW FLESHED SORTS.

EMERALD GEM.-A small or medium sized, nearly round variety, but having very thick flesh. The skin is dark green with a few lighter colored stripes. The flesh is salmon colored, very high Havored and sweet. This can be recommended to those who wish a very high flavored fruit, as one of the best in quality.

SURPRISE.-Vines hardy and productive; fruit oval, not deeply ribbed, covered with slight patches of netting; skin yellowish-white; flesh deep salmon color. Quality the very best, and not (as it is often described) variable-because after

most careful selection, we have succeeded in securing a pure most careful entirely free from the green rind and the inferior flavored melons so often found in what is sold as Surprise.

JAPAN CORAL FLESH.-Developed by selection from the Surprise. It is of medium size, nearly round, slightly ribbed, with a little shallow netting on a green ground. The flesh is red, very thick, fine grained, and uniformly of fine flavor. Preferred by some to the Surprise on account of its green color, but we think it inferior in uniformity and quality to our improved strain of Surprise.
OSAGE.-This melon has made its way into public favor from the market rather than from the garden, and seems to be just what the people want. It is large, oval, slightly ribbed, dark green in color. The flesh is deep salmon, and is good to within a fourth of an inch of the rind. In quality it is sweet and moderately high flavored, combining the flavors of the old Cantaloupe and the green fleshed Nutmeg sorts.
LONG YELLOW.-A large variety; long, oval, deeply ribbed; flesh thick, light salmon colored, and of a peculiar musky flavor. This variety is used in its green state for mangoes.

## MKELON, InLATER.

French, Melon d'eau. German, Wasser-Melone.
Culture.-The essential thing is to get a good, strong vine early in the season, which may be secured by forming a large, well drained hill of rich earth, avoiding using the manure in such a way as to cause the plant to dry out under the hot sun. On this hill plant the seed as soon as the ground is warm and dry, and carefully protect the young plants from insects, and hasten their growth by the use of liquid manure.

PHINNEY'S EARLY.-A valuable variety for use in the North; hardy and a sure cropper. Vine vigorous and productive, fruiting quite early; fruit oblong, smooth, marbled with two shades of green; rind thin; flesh pink, very sweet, tender and brittle.


## D. M. Ferry \& Co's Peerless.

D. M. FERRY \& CO'S PEERLESS.--The best melon for private gardens and for market gardeners who deliver direct to consumers, and is grown extensively in some sections for shipping in car-load lots distances of two and three hundred miles. Vine moderately vigorous, hardy, productive; fruit medium sized, oval, finely mottled; rind thin; flesh bright scarlet, solid to the centre, crisp, tender and of the highest flavor. Our stock of this variety is most carefully selected.
DARK ICING.-Fruit large, nearly round, dark green, very indistinetly mottled with lighter shade. Flesh very rich, bright red. The juice, which is very abundant, is of rich, deep color and flows so freely as to be available as a drink. All of our stocks of Icing Melon are pure and perfectly distinct, showing very uniformly the characteristics of each sort as described.

ROUND LIGHT ICING. - Fruit medium sized, round, very
 light green or white, very sweet and tender. By many this is considered the best of all melons.

LONG LIGHT ICING.-A variety established by selection until it is uniformly long, oval in shape and nearly twice as heavy as the Round Icing. In other respects it is much like that sort and fully equal to it in quality.


BOSS.-We do not think this name is in good taste, but we are not responsible for that, and so good a variety should not be neglected because poorly named. Vines small, but vigorous, with small, finely divided leaves. Fruit above medium size, long, with rounded ends, very dark green skin, and exceedingly bright red flesh, which extends to within one-half inch of the surface, and is very sweet. Seed small, dark brown. It is an excellent sort for home use, but of little value for shipping.

BLACK SPANISH.-Vine small, so that they may be planted closer than most sorts. Round, very dark green, with scarlet flesh and black seeds. It is not so large as some of the other sorts, but very sweet and of fine flavor.


GYPSY, OR GEORGIA RATTLESNAKE.-One of the largest varieties, and stands shipment long distances. This sort is widely used in the South for northern shipments. Fruit cylindrical, square at the ends, smooth, distinctly
striped and mottled light and dark green. Flesh bright scarlet and very sweet.
CUBAN QUEEN.--One of the largest melons known, specimens having been grown that weighed eighty-two pounds. Vines vigorous; skin striped light and dark green. Rind medium thick; but the fruit stands shipment well. Flesh bright red, solid, very crisp and sugary.

KOLB'S GEM. - The most profitable variety to grow for shipping long distances. Vines of medium size, but remarkably vigorous and healthy. Leaves of medium size, deeply cut with a peculiar, frilled edge. Fruit of the largest size, round or slightly oval, marked with irregular mottled stripes of dark and light green in sharp contrast, which gives it a bright and attractive appearance. Outer rind or shell exceedingly hard and firm, resembling that of a winter squash. Flesh bright red, extending to within half an inch of the rind; always solid, very firm, a little coarse, but sweet and tender. An excellent keeper. Seeds dark gray.
MAMMOTH IRON CLAD.-Similar in marking and in general character to the Kolb's Gem, possessing the same good qualities of the fruit, and quite as coarse grained, but differing in shape, this being long and cylindrical like the Rattlesnake. The vines are also very large and coarse, and are late in coming into bearing, so that it does not succeed in heavy soils.
MOUNTAIN SWEET.-A large, oval variety; rind
 green; flesh scarlet and quite solid to the centre, very sweet and delicious. This is an old standard sort and one of the best for the home garden.
MOUNTAIN SPROUT.-A large, long, striped variety, with bright, scarlet flesh and drab colored seeds; it differs from the Mountain Sweet in color and shape, is rather late, and will keep longer in the fall.
ORANGE.-An oval melon, skin green; flesh scarlet, of good quality, and is peculiar in that the flesh may be easily separated from the rind like an orange.
ICE CREAM.-Medium sized, with scarlet flesh, and very sweet: a good variety for main crop.
CITRON.-Employed in making preserves. Grows uniformly round and smooth, striped and marbled with light green. Flesh white and solid; seeds red.

## TKUSHRO○TVS.

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

CUlture.-Mushrooms can be grown in the cellar, in sheds, or in hot-beds in open air, on shelves, or out-of-the-way places. Fermenting horse manure at a temperature of about 70 degrees, mixed with an equal weight of fresh sod loam, is made into beds the size required, eight inches
 deep. See to it that the bed is packed very solidly and evenly. In this bed plant the broken pieces of spawn six inches apart, covering the whole with two inches of light soil, and protect from cold and rain. The mushrooms will appear in about six weeks. Water sparingly and with luke warm water.


## MTUSTARD.

French, Moutard. German, Senf.
Mustard is not only used as a condiment, but the green leaves are used as a salad, or cut and boiled like spinage.

Ccltcre.-Should be the same as that of cress.
GOLDEN.- A new and very superior sort, having broad leares of a rich. lemon color, which they retain after cooking. In flavor it is superior to the old sorts and is also fully equal to them in hardiness.

SOLTHERN GIANT CERLED.-This mustard is very highly esteemed in the South, where the seed is sown in the fall, and the plants used very early in the spring as a salad. The seed is brown and produces plants which grow about two feet high and form enormous branches, six of which will fill an ordinary barrel.

WHITE ENGLISH.-The leares are light green, mild and tender when young; seed light yellow.

## NASTURTIUTVI.

French, Capucine. German, Kapuziner Kress.


Nasturtium.
For other varieties see Flower Seeds. deep, by the side of a fence, trellis work. or some other support, to climb upon. They will thrive in good ground in almost any situation, but are more productive in a light soil

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

## OKRA.

French, Gombo. German, Ocher.
This is an annual from the West Indies, cultivated for its green seed pods, which are used in soups or stewed and served like asparagus. It is highly esteemed in the South for making gumbo soup. The pods when young and tender should be sliced in sections, strung on a thread and hung up in the shade to cure like dried apples; in this condition they can be used for soup at any time.
Cultcre.-Sow the seed thinly in dry, warm soil, in shallow drills two feet apart. After the plants are up, thin them out to nine inches apart; hoe frequently and draw a little earth to the stems as they continue to grow. Gather the pods when quite green, and about an inch and a-half long.

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

DWARF WHITE.-The longest podded variety. Two and a-half feet high, very productive; mature pods a foot long, very thick and fleshy.

## ONION.

## French, Ognon. German, Zwiebeln

The onion not only enntains considerable nutriment and has valuable medicinal properties, but is most useful in counteracting the bad effects of sedentary life. The disagreeable odor it imparts to the breath may be avoided in a great measure by thorough cooking, or by eating a few leaves of parsley.
There is no vegetable where the quality of the seed exerts a greater influence upon the crop than in onions. On our trial grounds we have found a difference of over 400 per cent. in the marketable product of two rows of onions planted the same day side by side, thinned to the same number of plants to the rod, hoed and treated in every wan precisely alike, the difference being entirely in the sowings, which were samples of seed offered us by two growers. Here, then, if nowhere else, the greatest care should be taken to secure the best possible seed. Seed grown in the North will be pretty sure to produce better onions when sown in the Southern States than southern grown seed.
We make a specialty of onion seed, and grow and dispose of many tons annually. The demand for our seed has increased so rapidly that we are yearly increasing our facili-
ties for growing, so that we think we annually produce on our seed farms near Detroit the largest crop grown by any one firm in America. Our stock is all grown from choice. selected bulbs, under our own supervision, therefore those who order seed of us will be sure of getting nev: choice, seed of the best quality.

## HOW TO RAISE ONIONS.

This is a question we are asked many times every year. and which we will try to answer from our experience in raising many thousands of bushels.

Soil.-A good crop of onions can be raised on any soil which will produce a full crop of corn. unless it be a stiff clay, very light sand or gravel, or certain varieties of muck or swamp lands. We prefer a rich, sandy loam, with a light mixture of clay. This is much better if it has been cultivated with hoed crops, kept clean of weeds and well manured for two years previous, because if a sufficient quantity of manure to raise an ordinary soil to a proper degree of fertility is applied at once, it is likely to make the onions soft. Large and fine crops of onions are often raised on black muck lands, but they must be "sweet" and well drained. Ordinary swamp land will not do, and even on the best of muck the first crop is apt to be soft and "necky.

Manure.-There is no crop where a liberal use of manure is more essential than in this. Eren on the deep. black muck onion lands of the Western Reserve, manure is essential to a good crop, and not only is the quantity but the quality of the manure used of the greatest importance. If it is too rank it is quite sure to make soft onions, with many scallions. It should be well fermented and shoveled over at least twice during the previous summer to kill weed seeds. Of the commercial manures, we prefer fine ground bone to any other. but large crops are raised by the use of superphosphates. If
these manures are used, one-half should be applied when the crop is sown, and the rest just before they begin to form bottoms.

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

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

Cultivation.-As soon as the onions are up so they can be seen the length of the row, give them the first hoeing, just skimming the ground between the rows. We use a hoe made expressly for this purpose. The blade is eight inches long and one and a-half broad, with a long, crooked shank set in a handle five feet long. The shape of the hoe allows the earth to pass over the blade without moving it out of its place. A few days after give them the second hoeing. this time close up to the plants, after which weeding must be continued. This operation requires to be carefully and thoroughly done. The weeder nust get down to his work on his knees astride of the row, stirring the earth around the plants. in order to destroy any weeds that have just started and cannot be seen. In ten days or two weeks they will require another hoeing and weeding similar to the last: aud two weeks later give them still another hoeing, and if necessary another weeding. If the work has been thoroughiy done, and at the proper time, the crop will not need anything more until ready to gather.

Gathering.-As soon as the tops die and fall the crop should be gathered by pulling four rows and laying them in a single one, the tops all one way, and then returning on the next four, forming a similar row, but with the tops in the opposite direction: laying the tops in this way greatly facili-
tates the " topping." If the weather is fine they will need no attention while curing, but if it is not they will need to be stirred by simply moving them slightly along the row. When the tops are perfectly dry, cut them off about half an inch from the bulb, and throw each pair of rows together, forming windrows about nine feet apart. After a few days more of bright weather they will be fit to store.

For Pickles or Sets.-Good ground should be used, prepared as above, but the seed sown in broad drills and very thick, forty to sixty pounds per acre.
How to Keep Onions Through Winter.-The essentials for the preservation of onions are dryness, thorough ventilation, coolness, and freedom from frost, or if frozen they must not be permitted to thaw and freeze again.

One of the most popular methods of keeping onions is to spread straw to the depth of eighteen inches upon the barn Hoor, scaffold or garret; upon this spread the onions six to ten inches deep, and cover with two feet of straw. If in good condition and sufficient depth of covering is used, they will keep in fine condition till May.

A cool, dry cellar of some out-building, barn, or carriagehouse will be found excellent for keeping onions, if it has windows for ventilation. The cellar of a dwelling house is usually too warm. They should be spread on scaffolds, about six inches deep, with room enough between the boards for the air to circulate. On approach of cold weather, close the doors and windows, and keep the temperature just above the freezing point. With proper care they can thus be kept without freezing at all, and will come out nice and sound in the spring.

EXTRA EARLY RED.-A medium sized flat variety: an abundant producer, and very uniform in shape and size; moderately strong flavored, and comes into use nearly two weeks earlier than the Large Red Wethersfield; very desirable for early market use.

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

SOUTHPORT RED GLOBE.-For some years the onions from Southport have commanded an extra price in the New York markets, because of their beautiful shape and color. We are able to offer a lot of seed grown from selected bulbs, and, we believe, superior to any other in the market. The variety is of medium size, spherical. with small neck, very deep, rich red color, and of superior quality.


No. 1, Extra Early Red; No. 2, Large Red Wethersfield; No. 3, Yellow Danvers:' No. 4, White Portugal; No. 5, White Silverskin; No. 6, White Globe.

LARGE YELLOW STRASBURG, OR YELLOW DUTCH.-One of the oldest sorts. Flat, flesh white, fine grained, mild and well flavored

MICHIGAN YELLOW GLOBE.-The largest crops of onions are always produced on rich, black lands. On such soils it is found that a globe shaped onion gives the largest return, and to meet the demands of the professional onion growers located on such lands, we have developed this variety. The bulbs are uniformly spherical, large, with very small necks; of a rich orange yellow color, enormous yielders, and splendid keepers. No onion grower can afford to plant inferior seed when such as this can be procured.
YELLOW DANVERS.-A fine variety of medium size, globular; skin yellowish-brown; flesh
 white, comparatively mild and well flavored: productive, six hundred bushels per ac. seed being a not uncommon crop. By careful selection we have improved the original shape of this variety, so that to distinguish it from the old stock many seedsmen catalogue it as Yellow Globe Danvers; but a true Danvers onion never can be as full or globe shaped as the White Globe, for it would be sure to lose some of the good qualities of the Danvers if changed in form to that extent.

WHITE PORTUGAL, OR AMERICAN SILVER-SKIN.-A large, flat onion; of mild flavor; fine for early winter use, and much esteemed for pickling. It is the best keeper of the white varieties.
PHILADELPHIA SILVERSKIN.-This is the variety
 so extensively grown in the vicinity of Philadelphia for the production of white sets. Though not so desirable as a mature onion, this seems to be one of the best for sets.
WHITESIL-VERSKIN.-This is small, silvery white, and, from its small size and handsome appearance, is often used for pickling.
ROUNDWHITE SILVERSKIN. This is uniformly small, round and handsome, with an opaque white skin, which does not turn green upon exposure to the sun. They are also very compact and hard, but at the same time crisp and brittle, making them the best pickling onion ever introduced.

WHITE GLOBE.-Yields abundantly, producing handsome and uniformly globe shaped bulbs. The flesh is firm, fine grained, and of mild flavor. Sometimes called Southport White Globe.

EL PAZO, OR LARGE MEXICAN.-Grows in Mexico to a diameter of six inches, and to a weight of two or three pounds, and used in that region in preference to any other sort. Color variable from white to light red; flesh white, rather coarse grained, but of very mild flavor. Resembles a mammoth White Portugal.

## Foreign Onions.

The following varieties have been tested in this country, and have given perfect satisfaction. While we would not recommend the risking of a large crop of onions by sowing imported seed, we believe the following varieties will be found very desirable for early market and home garden use. The flavor of the Italian varieties is mild, and they are every way well adapted to culinary purposes.

QUEEN.-A silver skinned variety, of quick growth and remarkable keeping qualities. If sown in early spring it

will produce onions one to two inches in diameter early in summer, and if sown in July, will, with favorable weather, be ready to pull late in autumn, and be sound and fit for use until the following summer. Particularly valuable for pickles, as, if sown thickly, they will mature perfect, hard onions from one-half to three-quarters of an inch in diameter.

EARLY NEAPOLITAN MARZAJOLA.-A beautiful, flat, white skinned variety, one of the earliest of all, and a good keeper. It can be sown in February or March, and will mature a crop very early in the season; or if sown in July, the crop will be matured in the same season. In the South the seed can be sown in the autumn, and large onions produced in March.


Giant White Italian Tripoli.
GIANT WHITE ITALIAN TRIPOLI.-A large, beautiful, pure white, flat onion of mild and excellent flavor, and will produce a somewhat larger onion from seed than our White Portugal; but to attain their full size the plants should be started very early in a hot-bed and set out in rich soil.

MAMMOTH SILVER KING.-An enormously large, flat onion, resembling the White Italian Tripoli, but is larger, slightly later and a better keeper, making it better suited for fall and early winter market. Skin silvery white, flesh pure white, very tender and mild flavored.
GIANT ROCCA.-An immense onion. Globular in form; skin light brown; flesh mild and tender. It will produce a
 large onion from seed the first season, but to attain the largest growth, very small bulbs or sets should be put out the second spring, when they will continue increasing in size, instead of producing seed, as is the case with American onions.

## BULBS

TOP SETS, OR BUTTONS. These produce on the top of the stalk instead of seed, a number of small bulbs or onions. about the size of acorns, which, if planted, will produce a large onion, maturing earlier than from seed. The large onion produces the top onion, and the little top onion produces the large onion.
RED BOTTOM SETS.-Produced by sowing seed very thickly in the spring and not thinning out. They mature under this method when about half an inch in diameter, and are used precisely as top onions are, setting them out in the spring, instead of sowing seed.
YELLOW BOTTOM SETS.-Identical with the preceding, except in color, and used in the same manner.
WHITE BOTTOM SETS. - The seed of the White Silverskin or White Portugal varieties is used to produce the white set. They do not keep as well as the red or yellow, but produce beautiful white onions early in the season.

ENGLISH MULTIPLIER.-Esteemed by many as the best variety for early use. It is large sized, of a mild, sweet, sugary flavor; very early and a large producer. The large onion produces several small ones in clusters around the bulb, growing mostly on the top of the ground.

Any of the preceding five varieties can be recommended as a small early crop for family use and early home market, but not as a main crop, the increase of marketable onions over the seed being too small. Of all the various modes of propagation, sowing the seed for a main crop deserves the first rank. Its cheapness compared with other modes, the fucility with which seed is sown, and the superior bulbs which it produces, recommend it to general use.

## PARSLEY.

## French, Persil. German, Petersilie.

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

Culture.-It requires rich, melluw soil. The seed is even slower than parsnip in germinating, and should be sown as early in the spring as possible, and the plants transplanted when they are two inches high. The oftener they are transplanted and cut back, the finer and more perfect the leaves will be. When well grown each plant will form a handsome rosette eighteen inches or more in diameter.

PLAIN.-This is the hardiest variety, and is preferred by some on this account and because the leaves are lighter and more graceful


CARTER'S FERN LEAVED.-A new variety of most beautiful form and coloring, and is well adapted for garnishing dishes on the table, and also makes a very ornamental plant in the flower garden.
CHAMPION MOSS CURLED.-A compact growing, finely curled variety, of a bright, slightly yellowish-green color. Very handsome and attractive.
FINE TRIPLE CURLED, OR MYATT'S GAR-NISHING.-A fine free growing but not large variety, the plants bearing a great number of leaves, which are so abundant and so finely curled as to cause the plant to resemble a bunch of moss. The leaves are bright green, and the plant is very hardy. One of the best for market gardeners or the private garden.


Fine Triple Curled, or Myatt's Garnishing.
TURNIP ROOTEI, OR HAMIBIRG.-The root. which resembles a small parsnip, is the edible portion of this variety, which is extensively grown and used by Germans for flavoring soups, ete.


## PARSNIP.

French, Panais. German, Pastinake.
The value of the parship as a culinary vegetable is well known, but it is not generally appreciated at its full value for stock feeding On favorable soil it yields an im mense crop of roots, which are more nutritious than carrots or turnips, and particularly valuable for dairy stock.
Culture. - They do best on a deep, rich, sandy soil, but will make good roots on any soil which is deep, mellow and moderately rich, but fresh manure is apt to make the roots coarse and ill-shaped. As the seed is sometimes slow to germinate, it should be sown as early as possible; cover one-half inch deep, and press the soil firmly over the seed; give frequent cultivation, and thin the plants to four to six to the foot. In digging field crops, they may be thrown out so as to be easily gathered, by running a subsoil plow along one side of the row.
LONG WHITE DUTCH, OR SUGAR.-Roots very long, white, smooth, tender, sugary and most excellently flavored. Very hardy, and will keep through winter without protection.
HOLLOW CROWN, OR GUERNSEY.-Roots comparatively short, ending somewhat abruptly, with a small tap root; grows mostly below the surface has a very smooth, clean skin, and is easily distinguished by the leaves arising from a cavity on the top or crown of the root.

## PEAS.

French, Pois. German, Erbsen.
In spite of the multitude of varieties now in cultivation, there are each year many new sorts brought out, each of which is claimed to be superior. We take great pains to secure and test on our trial grounds samples of all these new sorts, and present the following list as containing all which are really desirable.

Culture.-For early peas the soil should be light, warm and sheltered, but for general crop a moderately heavy soil is better. Sow as early as possible a few of the earliest varieties on warm, quick soil, prepared the fall before. The


Ferry's First and Best.
general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in ripening. The first sowing will be earlier if covered only one inch deep: the other sorts should be covered from two to six inches deep, the deep planting preventing mildew and prolonging the season. Fresh manure, or wet, mucky soil should be avoided, as they cause the vines to grow too rank and tall.

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

All Wrinkled Peas remain longer in season, are more delicate in flavor, and are sweeter than the smooth sorts, for as in sugar corn the wrinkled appearance indicates $a$ greater amount of saccharine matter.

## EXTRA EARLY SORTS.

FERRY'S FIRST AND BEST.-Complaint is sometimes made that the different seedsmen offer the same pea under different names, but careful comparison convinces us that the stock we offer as First and Best is, indeed, the first and the best as to earliness and uniformity of ripening and for market gardeners' use, maturing all the pods in about fortyfive days, so that frequently the ground can be ready for a second crop in seven weeks from planting. Vines small, about eighteen inches high, bearing three to seven straight, handsome pods, each containing six to eight medium sized round peas of good quality.
D. M. FERRY \& CO'S EXTRA EARLY.-For family use this is probably equal to the preceding, though it does not ripen as evenly. Peas large enough to eat are afforded as early as from any variety, and the vines continue bearing for a week or ten days, which, for family use, is a desirable quality. The Rural New Yorker Pea, which is offered at a high price, has proved on our grounds very similar, but in no way superior, to our Extra Early.


> Bliss American Wonder.

BLISS' AMERICAN WONDER.-A variety whose stout, branching vines grow only about nine inches high, and are covered with long, well filled pods containing seven or eight large, exceedingly sweet, tender and well flavored peas, and are produced nearly as early as First and Best. We have taken particular pains in raising our stock, to be sure it was true and of the best quality, as some spurious stock is being offered.

EARLIEST OF ALL.-This is one of the best of the early peas, but unfortunately there has been a great deal of spurious and inferior stock sold under the name and so it has not become so popular as it deserves. The stock we offer is true and is very uniform and even, ripening as early as most strains of Extra Early, maturing all of the crop for one picking, and the peas retaining their color after cooking. We have carefully compared this with the best stock of Alaska sold by the introducer and have found it to be earlier and more uniform, and we believe it to be the best extra early blue pea in cultivation. Vines eighteen inches high, bearing pods which are uniformly straight and handsome, and well filled with peas of the best quality.

KENTISH INVICTA.-Vines about two feet in height, with straight, handsome, well filled pods. Peas superior in flavor to the white sorts; when ripe of a dull blue color. Tested by the side of our Extra Early, it proved only a few days later.


CARACTACUS.-This popular English variety grows from two to three and a-half feet high, is prolific and of good flavor, continuing longer in bearing than most extra early sorts.

EXTRA EARLY KENT.-This is a very early variety, growing about three feet high. Pods well filled with good sized peas; productive, ripening nearly all at once. An early market variety, when true, but has greatly degenerated of late years. Our stock is true.

IMPROVED EARLY DANIEL O'ROURKE.-By careful selection we have secured a stock of this old and popular variety, which has all the good qualities it originally possessed.
LAXTON'S ALPHA.-Vines about three feet high; seeds much indented and wrinkled, light blue, very tender and of delicious flavor; one of the best in every respect.


FERRX'S EXTRA EARLY TOM THE゙MB.-Established by many years' selection from the common Tom Thumb. Vines dwarf, about nine inches high, so that it can be planted in rows ten inches apart. Peas small, round and not of the very best quality.

BLUE PETER.- Sometimes called Blue Tom Thumb. A blue pea of fine quality; as dwarf as the Tom Thumb and a great producer. An excellent pea in all respects, and one of the best of the dwarf varieties. Peas large, round, semiwrinkled; dull blue in color.

MeLEAN'S LITTLE GEM.-A very desirable early, dwarf, green wrinkled variety, growing about fifteen inches high. When in a green state, it is very large, sweet, and of delicious flavor.

PREMICM GEMI.-Somewhat like the last. but with a little shorter, heavier, more prolific vine and larger pods. This and the last fully equal the later sorts in quality, which with their earliness, dwarf habit and productiveness, make them the most desirable for private gardens of any on the list.

BLISS' EVERBEARING.-A new variety maturing soon after the Gems, and continuing a long time in bearing. Vine stout, about eighteen inches high, bearing at the top six to ten broad pods. If these are removed as they mature, and the season and soil are favorable, the plant will throw out from the axil of each leaf branches bearing pods which will mature in succession, thus prolonging the season. Peas wrinkled, large, cooking quickly and very tender, of superior flavor; on this account preferred by many to any other sort, although they are not quite so sweet as some.


TELEPHONE.
McLEAN'S ADVANCER.-A green wrinkled variety, about two and a-half feet high, with broad, long pods, which are abundantly produced and well filled to the end. Considered by some the best of its season, being of most excellent flavor. This pea is used very extensively by the market gardeners in the vicinity of New York, on account of its great productiveness, the fine appearance of its pods, and its exceedingly fine flavor. After careful comparison with other stocks we are convinced that ours is the best in the country.

TELEPHONE.-This new pea has proved to be a valuable acquisition. Vines large, with large, coarse leaves. Pods very large, filled with immense peas, which are the largest of any, tender, sweet and of excellent flasor. Notwithstanding the large amount of inferior and spurious stock which has been sold, no pea of recent introduction has gained more rapidly in popularity than this, thus showing that it has sterling merit which gardeners appreciate. The stock we offer has been carefully selected and grown, and is more prolific and far better than that usually sold.

BLISS' ABL NDA ACE.-Vine of medium height and bearing along its entire length numerous well filled pods, each containing six to eight medium sized, roundish, wrinkled peas, which are of most superior Havor. Of the forty sorts tested on our trial grounds, this cooked the quickest and was considered one of the rery best in quality.

## LATE SORTS.

YORKSHIRE HERO.-Vines stout, about two feet high, bearing at the top a number of broad pods filled with large

peas, which keep a long time in season, and never become as hard as most sorts. They are of fine quality and will be preferred to any other by those who like a rich, marrowlike pea.
CHAMPION OF ENGLAND.-Universally admitted to be one of the richest and best flavored peas grown, and very productive. Height four or five feet; seed whitish-green and much shriveled. We consider this equal in quality to any in cultivation, either for the amateur or market gardener, as it is always more salable than other sorts.
STRATAGEM.-An English variety which has become very popular in this country. Vine of medium height,

but stout, with large, light green leaves, and having near the top a good number of large, long pods, well filled with large peas of good quality. The pods are the most showy of any of the varieties we offer.

PRIDE OF THE MARKET.-Vines of medium height, stiff, with large dark green leaves and bearing at the top, generally in pairs, a fair crop of very large, dark green pods well filled with large peas of good flavor. This has become popular on account of its handsome pods, and is one of the few English peas which do well in this country.
LARGE BLUE IMPERIAL.-About three feet high, and very strong. Pods large, long, pointed, rather flat, containing eight or nine peas. Seed large, blue and a little flattened. A good bearer, and one of the best varieties for summer use, but requires to be planted early, or it will be apt to mildew.
LARGE WHITE MARROWFAT.-Cultivated more extensively for the summer crop than any of the others. About five feet high, of strong growth. Pods large, cylindrical, rough, light colored and well filled; seed large, round and yellow or white, according to the soil in which they are grown. It is excellent for summer use, but inferior in quality to the newer sorts, although undoubtedly the most productive of the garden varieties.

LARGE BLACK EYED MARROWFAT.-An excel lent variety, growing about five feet high; pods large; a prolific bearer, and can be recommended as one of the very best Marrowfat sorts.

## EDIBLE PODDED SORTS.

DWARF GRAY SUGAR, EDIBLE PODS.-Grows about two feet high and is remarkable for its earliness as well as its prolific character. The seeds are large, shriveled, indented, gray. The pods are broad, flat and crooked, and contain five or six peas.
TALL GRAY SUGAR, EDIBLE PODS.-About five feet in height; very sweet and tender. Intended to be eaten only with the pods.

## FIELD SORTS.

The Golden Vine and Blue Prussian are, perhaps, the best varieties on the list for general cultivation, though large quantities of Creepers, Common White and Common Blue are used annually. The Golden Vine can be sown later than any other variety, and on lower land, as they are not liable to mildew. These varieties are used for field culture only. In their dry state they are used extensively for feeding stock, for making soups, and in the manufacture of coffee. It is highly essential to have them as free from bugs as possible, and for soups and coffee, absolutely necessary. We keep constantly on hand a large stock of all these varieties, obtained from the North, where the bugs do not infest them. Our customers can rely on having the seed pure and free from bugs.

## PEPPER.

## French, Piment. German, Pfeffer.

The pepper is an essential ingredient of most pickles, catsup, etc., and is also of great value for feeding to fowls during winter, a few chopped up with their feed once a week having a marked influence in increasing the number of eggs.

Culture.-Should be the same as for egg plant, and the plants need quite as much heat to perfect them, but taking a shorter time to mature, the seed may be sown later, or even planted out of doors after warm weather has fairly set in. Guano, hen dung, or any other bird manure, hoed into the surface soil when the plants are about six inches high, will be found to increase the product wonderfully.
CHILI.-Used in the manufacture of pepper sauce. Pods sharply conical, and exceedingly pungent when ripe. Requires a long, warm season, and plants should be started quite early in hot-bed. We offer both the red and yellow, which differ only in color.



LONG RED CAYENNE.-A long, slim, pointed pod and when ripe, of a bright red color. Extremely strong and pungent.
LARGE SQUASH.-Fruit large, flat, tomato shaped. more or less ribbed; skin smooth and glossy: flesh mild, thick meated and pleasant to the taste, although possessing more pungency than the other large sorts; very productive and the best variety for pickling.
RCBY KING.-An improved American sort reaching the largest size and yet retaining the symmetrical shape of the smaller sorts. It is very bright colored and beautiful. sweet and mild flavored, and one of the best for stuffed pickles.
L.ARGE BELL, OR BLLL NOSE.-A very large sort, of inverted bell shape, suitable for filling or for a mixed pickle. Flesh thick, hard and less pungent than most other sorts, and one of the earliest varieties.


SWEET MOLNTAIN,-Plants very vigorous and productive, growing upright, with moderately large leaves. Fruit very large, long. often eight inches or more in length. by two or three in diameter, very smooth and handsome. being when green of a bright deep green color, entirely free from any purple tinge, and when mature. of a rich red Flesh very thick. sweet and mild flavored. Well suited to use as a stuffed pickle.
CARDINAL.-A new pepper with long, curved, tapering pod, about two inches thick at the stem end: very sweet and tender, and exceedingly handsome. It would be worthy of cultivation for its beauty alone, there being no flower which can be grown in the North that equals it in depth, purity and brilliancy of color.
GOLDEN DAWN.--Plants quite dwarf but very prolific. Fruit medium sized and of inverted bell shape, rich golden yellow color, with very thick, sweet, mild flavored flesh.

## PUTKPKIN.

French. Potiron. German, Kuerbis.
The pumpkin more properly belongs to the farm than the garden, especially as it readily mixes with and injures the quality of the finer squash


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

LARGE VELLOW. Grows to a large size and is adapted for cooking purposes and feeding stock. It is irregular in shape and size: some being depresse and flattened at the ends others round or elongated: of deep, rich yellow color; of fine grain and excellent Havor.

SWEET CHEESE, OR KENTCCKY FIELI.By far the best variety for planting in the South. Large. oblong, mottled, light green and yellow, with very thick. sweet, tender, yellow flesh.

CISHAW.-A great favorite in some sections because of its large size fre. because of its lar se sectize. quently growing to weigh as much as seventy pounds. In form much resembling the Winter Crookneck Squash: color light cream, sometimes slightly striped with green: thesh salmon colored. Fery productive.


## RADISH.

French, Radis. (ierman. Rettig.
Cultirated for its roots, which should always be eaten when quite young, as they are apt to be pithy and tough when full grown. The young seed leaves are used as salad. and the green seed pods for pickles.

Culture.-A warm, sandy loam. made rich and light by some good, well rotted manure and a liberal dressing of salt, will be most likely to afford them brittle and free from worms. Sow in twelve inch drills as early as the ground can be worked and once in two weeks for succession, and thin to be worked. and once as soon as the rough leaves appear one or two inches apart as soon as the romgh leaves appear
It should be borne in mind that radishes must have plenty of room and be grown quickly, or they teill invaribly be tough and vormy.

NON PLUS ULTLA, OR EARLY DEEP SCARLET TURNIP, FORCING.- The smallest topped and earliest forcing radish in cultivation. Roots small, round, deep rich red, with very crisp, tender, white flesh. This is the best


Non Plus Ultra, or Early Deep Scarlet Turnip, Forcing.
variety for forcing, as it will mature in eighteen to twentyone days, and the tops are so small that a large number can be grown in a single bed.
EARLY SCARLET TURNIP, WHITE TIPPED, FORCING.-A beautiful variety, deep scarlet with white tip. It is very ornamental for table use, and is becoming


Early Scarlet Turnip. White Tipped, Forcing.
very popular as a market variety. Almost as early as Non Plus Ultra and does splendidly as a forcing radish. This is offered under the name of Rosy Gem. Rapid Forcing, etc.
EARLY SCARLET GLOBE.-This variety makes roots


Early Scarlet Globe. fit to pull almost as early as Non Plus Ultra, but they are much larger when full size, and for this reason are very popular in some markets. Roots round or slightly olive shaped; color rich deep scarlet; flesh white and tender. We commend this especially to gardeners whose markets demand a large, round forcing radish.

EARLY SCARLET TURNIP ROOTED.-A small, round, red, turnip shaped radish, with a small top and of very quick growth. A very early variety, deserving general cultivation on account of its rich color and crisp, tender flesh; should be used while young.

EARLY ROUND DEEP SCARLET.-Similar in form to the Scarlet Turnip, but much darker in color. Flesh white, very crisp and tender; top small. Well adapted for growing in frames. The roots bring the highest price because of their peculiarly brilliant color.

EARLY WHITE TURNIP ROOTED.-A little flatter than the preceding, and pure white in color, with a very small top; flesh pure white, and semi-transparent. It is a few days later than the last, and will bear the heat longer without becoming spongy.
EARLY DEEP SCARLET, OLIVE SHAPED, SHORT LEAF.-This differs from the Early Scarlet Olive in being deeper in color, terminating more abruptly at the tip, coming to maturity a little earlier, and in having fewer and shorter leaves, all of which qualities make it more desirable for forcing, and we think it the best of the intermediate sorts for this purpose.


Early Deep Scarlet, Olive Shaped, Short Leaf, Forcing.
EARLY SCARLET, OLIVE SHAPED.-In the form of an olive, terminating in a very slim tap root. Skin fine, scarlet; neck small; flesh rose colored, tender and excellent. Early and well adapted for forcing or general crop.

EARLY WHITE, OLIVE SHAPED.-Differs from the Scarlet Olive Shaped in color and in being a little longer.


French Breakfast. The roots when well grown, are clear white, crisp and mild flavored.

FRENCH BREAKFAST.A medium sized radish, olive shaped, small top, of quick growth, very crisp and tender, of a beautiful scarlet color, except near the tip, which is pure white. A splendid variety for the table, not only on account of its excellent qualities, but for its beautiful color.

EARLY LONG SCARLET, SHORT TOP, IMPROVED. -This is unquestionably the best standard variety for private garden or market use, particularly for out door culture. It grows six or seven inches long, half out of the ground; is uniformly straight and smooth; is very brittle and crisp, and of quick growth; color bright scarlet; top small.
WOOD'S EARLY FRAME.-A sub-variety of the preceding; is a little shorter and thicker and is better adapted to forcing. Color brilliant scarlet; flesh mild, brittle and of fine flavor.
IMPROVED CHAR-TIER.-Although this new American variety is too strong growing to be profitably used for forcing, it is one of the very best for early sowing out of doors. The roots come to usable size very early and remain hard and crisp until they reach a diameter of one and one-half or two inches, and so furnish good roots two or three times as long as any of the above. Roots scarlet rose above, shading into white at the tip. They are long, cylindrical for the upper two-thirds, and then gradually taper to the tip. Flesh white, crisp and mild flavored.
LONG WHITE VIENNA. - Earlier than the last, with straight, smooth, white roots; flesh white, very tender, crisp and juicy.
LONG WHITE NA-PLES.-Skin white, flesh fine grained, crisp, and of very good flavor.
LARGE WHITE SUMMER TURNIP.One of the earliest of the summer varieties, coming to a usable size in forty days from sowing. Root round, smooth, very white and handsome. Flesh crisp, tender and rather pungent in flavor.


Improved Chartier.


Large White Summer Turnip.
LONG BLACK SCMMER.-Unfortunately the Long Black Spanish winter radish is not adapted to late spring and summer culture, for the reason that when planted early it runs to seed very rapidly; while in this new and distinct sort we have a true summer radish, which may be planted from March to July and treated in every way as any other, and if planted late is as good in every respect for winter use as the Long Black Spanish Winter. Top very much smaller than in that variety; roots a little shorter, more symmetrical, but with a rougher skin, and tapers more abruptly at the tip; color of skin deeper black: flesh as white and firm, flavor as pungent We believe this to be worthy of thorough trial by all nur eustomers.


WHITE STRASIBIRG.-Although this grows to the largest size it is usable when quite small, and thus covers a long season. The mature ronts are four to five inches long and about two inches thick; very white and the flesh is exceedingly crisp and tender. One of the best of the large summer sorts.

EARLY WHITE GIANT STUTTGART.-Root large, often four inches in diameter, top shaped. Skin white; flesh white and crisp and not becoming strong or pithy until very late, so that those not used as a summer radish can be stored for winter use.

## GOLDEN GLOBE.-This

 variety is very popular in the Southern States. It is of quick growth, tender and brittle, of perfect globe shape, and golden colored skin. It seems to produce tender radishes in the hottest climates.GRAY SUMMER TUR-NIP.-Round, turnip shaped, though often irregular in form. The skin of the upper part is mottled with greenishbrown, wrinkled and often marked with transverse white lines. Flesh mild, of greenishwhite color, and tolerably solid. Half early, and a good variety for summer use.

## WINTER VARIETIES

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


Large White Spanish, Winter. Scarlet China, Winter.
CALIFORNIA MAMMOTH WHITE CHINA, WINTER.-First introduced into this country by the Chinese in California. It is pure white, about one foot long, and two or three inches through, tapering regularly to the tip. The flesh is tender and crisp, and keeps well through the winter.

LARGE WHITE SPANISH, WINTER. - Roots long, top shaped, or sometimes fusiform, retaining their diameter for twothirds their length, sharply conical at the base, and when full grown measuring seven or eight inches in length, by about three inches in diameter. Skin white, slightly wrinkled, sometimes tinged with purple where exposed to the sun. Flesh white, solid and pungent, though milder than the Black Spanish.

SCARLET CHINA, WIN-TER.-Roots cylindrical, or largest at the bottom, tapering abruptly to a small tap. Skin very smooth and of a bright rose color; flesh firm like the Black Spanish, but more pungent.

ROUND BLACK SPANISH, WINTER.-Roots round, sometimes top shaped, three or four inches in diameter: skin black. flesh white, very compact and highly flavored. An excellent sort for winter, as the roots keep a long time.

LONG GRAY LAON, WIN-TER.-Roots long, tapering regularly to the point; skin gray; flesh white. Larger and more attractive than the Black Spanish and keeping nearly as well.
LONG BLACK SPANISH, WINTER.-One of the latest as well as the hardiest of the radishes, and is considered an excellent sort for winter use. Roots oblong, black, of very large size and firm texture.


Long Black Spanism.

RAPE.
This plant is extensively cultivated in England, both for forage and for the seed, from which is manufactured rape seed oil. The seeds are also much used as food for canary
birds. It is often used as a salad plant like mustard. As a forage plant, the yield is abundant, and fed green it is nutritious, and nearly all animals are very fond of it. Sow in May, either broadcast or in drills; if the former, ten pounds, and if the latter, four pounds per acre.

## Rhubarb, or Pie Plant.

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

Culture. - Rhubarb succeeds best in deep, somewhat retentive soil. The richer its
Rhuearb. $\qquad$ stirred the and the deeper it is an inch deep and thin in drils plants to six inches apart. In the fall, trench a piece of ground and manure it well; then transplant the young plants into it three feet apart each way. Cover with leaves or litter the first winter, and give a dressing of coarse manure every fall. The stalks should not be plucked till the third year, and the plant never allowed to exhaust itself by running to seed. Our seed is saved from selected plants of Linnæus, Giant, and other improved sorts. Like the seeds of fruit trees, seed cannot be relied upon to reproduce the same variety.

## RIGE, MLILD.

## Zizania aquatica.

An annual which sows itself in the fall, about the middle of September, lies dormant all winter, in spring commences to sprout as soon as the water gets warm, reaching the surface during the first half of June. It grows very rapidly in one to four feet of water, ripens late in August or early in September. It should be planted in the fall, before ice forms, broadcast, from a boat, in two or three feet of water, having a mud bottom. It has been successfully planted through the ice in winter and in the spring, but it succeeds best when planted in the fall. As an attraction for wild fowl it cannot be equaled. In large ponds and lakes it purifies the water, affords a refuge for the small fry from the large fish, as well as furnishing the small fry plenty of food from the animalculæ upon its stalks; for planting in fish ponds it is especially desirable. It also does well along the shores of marshes, and makes a good hay. In the South two crops can be cut, and all cattle are very fond of it.


## SAlsify, or VEGETABLE ©YSTER.

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

Culture.-It succeeds best in a light, well enriched soil, which should be stirred to the depth of twelve or fourteen inches. If it is necessary to use manure, it should be very fine and well rotted, for if it is fresh and coarse, the roots will grow irregular and ill shaped. Sow early and quite deep, and give the general culture recommended for the parsnip. The roots are perfectly hardy, and may remain out all winter, but should be dug early in the spring, as they deteriorate rapidly after growth commences. Store a quantity for winter use in sand.
LARGE WHITE.- The old sort; roots medium size, smooth; flesh white.

MAMMOTH SANDWICH IS-LAND.-This is in every way superior to the old sort, being larger, stronger growing, and less liable to branch. Invaluable to market gardeners.

## SPINAGE.

French, Epinard. German, Spinat.
The spinage is very hardy, extremely wholesome and palatable, and makes a delicious dish of greens, retaining its bright green color after cooking.


Culture.-Should be planted in very rich ground, the richer the better. Sow in drills one foot apart, and commence thinning out the plants when the leaves are an inch wide. and all should be cut before hot weather, or it will be tough and stringy. For early spring use the seed should be sown early in autumn. In the Northern States the plants will require a slight protection of leaves or straw, but in the Southern States no protection is necessary, and they will continue their growth most of the winter.

SAVOY LEAVED.- The earliest variety. Plant of upright growth with fine leaves, which are savoyed like those of a cabbage. It grows quickly to a suitable size for use, but soon runs up to seed.


ROUND SUMMER.-This variety is generally preferred for early spring sowing, and is the most popular with our market gardeners; the leaves are large, thick and fleshy, not quite so hardy as the Prickly, but stands the winter very well.

MMPROVED THICK LEAVED.-An improvement on the preceding, with larger and thicker leaves, and of more substance. Particularly recommended for market garden use.

LONG STANDING.-An improved strain of excellent merit, having all the good qualities of the ordinary sorts: what renders it especially desirable is the fact that it is much later in going to seed than any other variety. This valuable property will be appreciated by market gardeners.


## Long Standing Prickly.

LONG STANDING PRICKLY.-The plants mature a little later than the round leaved sorts, but furnish a large quantity of very thick and well flavored leaves. This is one of the best sorts for market gardeners.
PRICKLY WINTER.-The hardiest variety, and will withstand the severest weather, with only a slight protection of leaves or straw. The seed is prickly, leaves triangular. oblong or arrow shaped. It is employed for fall sowing, which in this latitude is made about the first of September.

## SQUASH.

French, Courge. German, Kuerbis.
The squash is one of the most nutritious and valuable of all our garden vegetables. The summer varieties come to the table early in the season, while the winter sorts can be had in perfection from August until the summer varieties are again in condition. Few farmers appreciate the value of winter squash as food for stock. We think an acre of squash costing no more to cultivate and much less to secure, will give twice as much food available for feeding stock as an acre of corn, and we strongly urge our readers to try a "patch " for this purpose.
Culture.-The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same as those given for cucumbers and melons, but the plants are less particular as to soil. The summer varieties should be planted six feet apart each way, and the winter sorts eight feet. Three plants are sufficient for a hill. Care should be taken not to break the stems from the squashes intended for winter use, as the slightest injury will increase the liability to decay.

sallop she well flavored; very productive; used when young and tender.

EARLY WHITE BCSH SCALLOP.-Similar in form to the preceding, but with a clear, white skin, and more tender and delicate flesh. By many considered the best of the summer varieties.


Summer Crookneck.
SUMMER CROOKNECK.-One of the best; very early and productive. It is small, with crooked neck, covered with warty excrescences; color bright yellow; shell very hard when ripe

PERFECT GEM.- Vine coming into bearing late, but very productive. Fruit four inches in diameter, nearly round, ribbed, white; flesh yellowish-white and cooking very sweet and well flavored. We think this is the best of the intermediate kinds, and many think it fully equal to the winter sorts

## WINTER VARIETIES.

EARLY PROLIFIC MARROW.-A new sort developed by selection from the Boston Marrow, but much earlier. and the earliest of the winter varieties. Fruit small, of deep orange color netted with cream; shape similar to Boston Marrow; flesh thick, deep yellow, of fine quality.


IMPROVED AMERICAN TURBAN (ESSEX HYBRID). -Developed by selection and crossing from the old American Turban, and differing from it in being of a richer color, having a hard shell, and in its remarkable keeping qualities. It is of medium size, and the skin is a rich orange red. Flesh deep, rich colored, very thick, and of excellens quality.


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


HUBBARD.-This is a superior variety, and the best winter squash known; flesh bright orange yellow, fine grained, very dry, sweet and rich flavored; keeps perfectly good throughout the winter; boils or bakes exceedingly dry and is esteemed by many to be as good baked as the sweet potato. We have taken the utmost pains with this sort and can recommend our stock as in all probability the best in the country, and think our customers can plant it in perfect confidence that every fruit will be a pure Hubbard.


BUTMAN.-This is a cross between the Yokohama and Hubbard. The flesh is between a salmon and a lemon color. It has all the qualities of a first class squash, being very dry, fine grained, and of excellent flavor. Size medium; color light stone, distinctly striped and splashed with yellowishwhite.


Marblehead.
MARBLEHEAD.-This is unquestionably an excellent keeper, and is finer grained and drier than any sort we have seen. About the size of the Hubbard, with shell of bluishgreen, and bright orange flesh. Requires the whole season to mature.

WINTER CROOKNECK.-The most certain of any to produce a crop, its strong growing vines suffering less from
insects than those of the other sorts. Color varying from dark green to clear yellow, frequently changing to the latter


Winter Chookneck.
after being gathered. Flesh variable, affected by soil and weather, sometimes close grained and fine flavored, and in other cases coarse and stringy. If kept from cold and damp, they will keep the entire year.

## SUGAR GANE.

EARLY AMBER.-This comparatively new variety is now being successfully grown in our extreme northern latitudes. It may be planted as late as the 15th of June, and will be ripe enough to manufacture in September. It is the earliest variety with which we are acquainted. The beautiful, amber colored syrup it produces is thought to be superior in flavor to any other, and for sugar it is unsur-

passed. There are many varieties that can be profitably grown where the seasons are long, but this can be grown wherever Indian corn will grow. It is useless to plant cane seed before the weather is warm in spring. Three or four pounds are required per acre.

EARLY ORANGE.-An exceedingly valuable variety, Very large, of strong and vigorous habit, and does not fall down. Its yield is twenty-five per cent, in excess of the Early Amber. It has a very pleasant flavor. It is early. maturing only ten days later than the Early Amber. We recommend it highly to all desiring a superior cane, for all localities, excepting the extreme North.

## SUNFLOMLER.

LARGE RLSSIAN.-Helianthus. - The sunflower, during the past few years, has attracted considerable attention as a profitable field crop, its leaves being used for forage and its seeds as food for poultry and the manufacture of oil. It is also planted with satisfactory results on low, swampy grounds, to absorb miasma. This variety has larger heads and stalks. more seed. and is much more valuable than the common sort.

## T®BACCO.

Tobacco is an annual plant, and although it grows to greater size in the South. an equally good quality can be produced in the hot, dry summers of the North. We have taken a great deal of pains to ascertain which are the best varieties for the general planter, and believe the list we offer contains all that are of special merit.
Ccltcre. - The seed should be sown as early as possible after danger of frost is over. A good plan is to burn a quantity of brush and rubbish in the spring, on the ground intended for the seed bed, then dig and thoroughly pulverize the earth and mix with the ashes, after which the seed may be sown and covered very lightly. When the plants are about six inches high, transplant into rows four or five feet apart each way, and cultivate thoroughly with plow and hoe.

STERLING.-The newest and brightest of the yellow type; and being the earliest to ripen, is surest in localities liable to early frosts.

LACKs.-Broad leaf, tough. fine fibre. On gray soils cures bright and elastic: on dark soils, rich and gummy. Known as Jesup or Beat All in some localities. Good and reliable.

HESTER. - A new variety, originated in Granville county, $\mathrm{N} . \mathrm{C}$. Has no superior for the yellow type, and makes fine cigar stock. It has size, shape, texture and color, and ripens early. It recommends itself greatly in this, that it has greater adaptability over a wider range of suils and latitude than any other of the yellow varieties, and may, on this score, be considered the surest.

SWEET ORONOCO.-Used for first class plug fillers, and makes, when sun-cured, the best Natural Chewing Leaf. A favorite for the "Homespun " wherever known. Known as Little Oronoco in some localities. Makes an Eastern Filler unsurpassed.

BRADLEY BROAD LEAF,-A popular variety for several types-export, manufacturing and cigars.

PERSIAN ROSE.-Finer than the Muscatel, and may be relied upon to make the finest cigar stock. A very promising variety
PIG HAVANA.-A hybrid Havana or Cuban seed leaf. A heavy cropper, of fine texture, delightful flavor and the earliest cigar variety to mature and ripen. Will make two crops from one planting in the South, while its earliness makes it most desirable for high latitudes.

CONVECTICCT SEED LEAF.-Best adapted to the climate of the Middle and Northern States, as it is more hardy and endures the cold better than the tender varieties grown south. In many of the Northern States and in Canada. this variety is the staple crop.
HAVANA.-From pure Cuban grown seed, raised in the famous district of Vuelta de Abajo. When grown in this country commands a high price for cigar stock.

## T○TM स T $\odot$.

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

## FIRST EARLY SORTS

ATLANTIC PRIZE.-After two years' careful trial we are convinced that this is the earliest tomato grown, and by earliest we do not mean that it ripens an occasional fruit earlier than any other sort, for while this is true, in addition to that it ripens a large proportion of its crop the earliest of any. This quality certainly makes this variety the tomato for market gardeners and all to whom earliness is a matter of first importance. Vines medium size, very hardy, bearing the fruit low down on the stem and in enormous clusters; fruit smooth, bright red. solid and of good Havor. We hope all of our customers will give this tomato a trial, as we feel confident that it will give entire satisfaction.

EARLY CONQCEROR.-This is an extra early sort, and is very popular. Vines vigorous, productive, bearing immense clusters of fruit, medium size, irregular, flattened and slightly corrugated, of scarlet-crimson color, often dotted and splashed with golden yellow markings.


CANADA VICTOR.-Very early. Vines large, spreading, productive. Fruit of light scarlet color, round, smooth, of medium size, solid and ripening up well. A very popular variety.

EARLY RED APPLE.-We have by careful and judicious selection established a strain of this variety so dis tinctly superior to the ordinary stock, as to be far more worthy of a new name than three-fourths of the novelties yearly introduced. It is not only an extremely smooth and perfectly shaped tomato, but it is also very early, ripening its first fruits almost as early as any sort in cultivation.


Early Red Apple.
Vines large, with large, dark green leaves; vigorous and wonderfully productive, being, we think, under high culture, one of the heaviest croppers of any; fruit medium size to large, and unlike most varieties growing larger as the season advances, perfectly smooth, solid, but without any core, deep, rich red color, and of excellent flavor. We think there is no better tomato for general use.

## RED VARIETIES FOR GENERAL CROP.

D. M. FERRY \& CO'S OPTIMUS.-A variety introduced by us, and, we believe, the best table tomato in existence. Vine medium sized, but vigorous, healthy and productive, bearing its fruit in clusters of five. Although not presented as a first early sort, many of our customers report that they have obtained ripe fruit from this as early as from any variety. Fruit medium sized, oval, very smooth and of exceedingly bright, rich crimson-scarlet color; very free from cracks and rotting little. The flesh is of a crimsonscarlet color quite distinct from, and more beautiful than, that of any other sort, and it is also the best in flavor and entirely free from the hard spots found in other large sorts. The Optimus is not only the best for home use and for market, but it is the best canning tomato in cultivation. We think that anyone who plants this sort either in a garden or for market will be satisfied that it is the most productive, the handsomest and best tomato in existence.

LIVINGSTON'S FAVORITE. - Vine medium, with large, dark green leaves, having numerous clusters of from three to seven large tomatoes, which are a rich dark red color, of oval outline, exceedingly smooth, flesh very firm, but without green spots. This is a favorite variety, on account of its smooth, handsome fruit.
TROPHY.-Well known as one of the best. Vines of medium size, but producing compact clusters of fruit in


TROPhY.
immense quantities; fruit large, smooth, of bright red color, solid and of good flavor. We have expended a great deal of labor on the improvement of this old sort, and think that the seed we offer is as good as can be grown.

PARAGON.-Vine very large, vigorous and productive, and continuing so until killed by frost. Fruit large, round,
of a dark, rich crimson-scarlet color, with occasionally a a purplish tinge. It ripens up evenly, and the flesh is thick and fine flavored.
LIVINGSTON'S PERFECTION. - A new variety, similar to the last, but an improvement upon it, being a

little earlier, and invariably smooth and handsome. It is one of the handsomest tomatoes grown, and all who have tried it pronounce it of the highest quality.

## PURPLE FRUITED SORTS.

ACME.-We have given a great deal of attention to the improvement of this variety, and think we have succeeded in making it the smoothest, the evenest in size, and the earliest of the purple fruited sorts. Vines large, extremely

hardy and productive, ripening its first fruits almost as early as any and continuing to bear abundantly until cut off by frost. Fruit in clusters of four or five, invariably round, smooth and of good size, free from cracks and stands shipping remarkably well; flesh solid and of excellent flavor. For market gardeners who want an early purple fruited tomato, either for a home market or to ship, for private gardens or for canners, it stands without a peer among its class.

ESSEX EARLY HYBRID.-Very similar to the Acme, fruit slightly darker purple, always smooth and handsome: quality among the best. Will certainly give satisfaction wherever the Acme does.


Turners Hybrid, or Mikado.

LIVINGSTON's BEACTY.-In shape like the Favorite, but we think it averages larger. Fruit very uniform and smooth, purplish-pink in color; flesh light pink, soft and well ripened, but not suitable for canning on account of its weak color; flavor good.
TURNER'S HYBRID, OR MIKADO.-The largest purple fruited tomato, single fruits of which weigh as high as twenty-eight ounces, while the average weight is probably not less than twelve ounces. Vines large, coarse growing, with leaves entire. like those of the potato plant; very productive and is early for so large a tomato; fruit extremely large, smooth to rather rough, solid, with few seeds. Demanded by those who want an extra large fruit particularly.
CINCINNATI PURPLE.-Fruit very large, deep pur-plish-red, solid and of good flavor. We have compared this with Surprise and other large sorts and have found it as large as any and smoother. We have picked fruits weighing one and one-half pounds which were as perfect and smooth as a Favorite.

GOLIDEN OUEEN.-The superior flavor of the vellow varieties is bringing them into favor as table fruit, and those who think of a yellow tomato as the rough fruit of the old


White Apple. yellow sorts will be surprised at this smooth. beautiful fruit, it being as smooth as the best of the red varieties, and of a fine and distinct flavor.

WHITE APPLE This old sort is often presented as a novelty as "Snowball," etc., but while no one should plant largely of it for market or home use, yet it is the best variety for eating from the hand as a fruit, The fruit is about one and one-half inches in diameter, round, perfectly smooth and of a yel-lowish-white color. Flesh very mild flavored and delicate. This variety is also sold as Ivory Ball and as Snowball.

PEACH. - This is a distinct and very attractive appearing tomato, highly desirable for preserving, eating from the hand or table decoration. Fruit resembles a peach in shape, size and color, and is covered with a delicate furze, which makes the deception quite complete; flesh tender and of good flavor. Should find a place in every garden.

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

YELLOW PIUM.-Fruit plum shaped, clear deep yellow color; flesh yellow and fine flavored; much esteemed for preserves.


Red Cherry.
RED CHERRY.-Fruit small, about five-eighths of an inch in diameter, perfectly round and smooth. Fine for pickles and preserves.
YELLOW CHERRY.-Differing from the above only in color.

GROUND CHERRY, OR HUSK TOMATO.-This is much liked by many for preserves and for eating from the hand. The seed we offer is that of the true Yellow Ground Cherry, and not the purple fruited sort which is searcely edible.

## TURNIP.

French, Navet. German, Rueben.
This wholesome and agreeable vegetable has been cultivated from time immemorial, as a field crop, and is one of the staple products of the farm. It is most easily affected in its form and flavor by soil, climate and mode of culture.

There are a great many varieties, but we have selected the following as the best for the garden or farm.

Culture.-Sow in drills fourteen inches apart, and half an inch deep, or sow broadcast, but in either case be sure to have the ground freshly dug. Keep them perfectly free from weeds, and when the bottoms begin to enlarge, brust away the dirt from about the roots to the depth of half an inch or more, and give them a light dressing of wood ashes. This is the surest mode of obtaining fair and smooth turnips in old gardens, where they are almost certain to grow wormy or strong flavored if the earth is allowed to remain in contact with the roots. For the spring and summer crops it is important to get them started very early, so that they may have time to grow to sufficient size before hot weather, when they will soon become tough and strong.

For Turntps.-For the fall and main crop, sow in the Middle and Western States from the middle of July to the last of August, as directed for the spring sowing. In the field, turnips are more generally sown broadcast, though much the larger crops are obtained by drill culture.
For Ruta Bagas.-The Ruta Baga is usually sown from the 20th of June till the 15th of July, in two-foot drills, and thinned out to ten inches apart. It is necessary that the ground should be dry and made very rich.
To preserve turnips in good order for winter, store them in barrels placed alongside the wall of a cool cellar and cover them with sand or turf to keep them fresh. Another method is to put them in a cellar or dry pit, and cover with straw, and then earth over to the depth of eight or ten inches. Thus protected, they will keep well till spring.
For feeding stock in fall and winter, there is nothing superior to Turnips and Ruta Bagas, and they will yield a larger amount of food than almost anything else on the same space of ground. We cannot too earnestly recommend farmers to increase their sowings largely, for we are sure no crop will prove more remunerative.


## Extra Early Purple Top Milan.

EXTRA EARLY PURPLE TOP MILAN.-Tope very small, distinctly strap leaved, and growing very erect and compact. This forms bulbs the earliest of any sort. The roots are very white, with clear purple top. The most desirable sort for forcing.

WHITE EGG.-A quick growing, egg shaped, perfectly smooth, pure white variety, growing half out of the ground, with small top and rough leaves. Its smooth, white skin and quick growth make it particularly adapted for fall market purposes. The flesh is very sweet, firm and mild, never having the rank, strong taste of some varieties.


Purple Top White Globe.


White Egg.

EAIEX WHITE HLAT DETCH, STEAP LEAVED. A most excellent early garden variety, much used in the


Early White Flat Dutch, Strap Leaved.
Southern States. Roots medium size, flat; color white; very early, sweet and tender. It is designed for table use, and is spongy and inferior when overgrown.

D. M. Ferfy \& Co's Improved Early Purple
Top, Strap Leaf.
D. M. FERRY \& CO'S IMPROVED EARLY PURPLE TOP, STRAP LEAF.-This is an early variety and a great favorite for table use; form exceedingly flat, like a


Large White Norfolk.
broad disc in shape, and of medium size; color purple or dark red above ground, white below; flesh white, fine grained and tender; leaves few, entire, upright in growth, resembling those of a horse radish; a purely American variety, and one of the best for general planting.
PURPLE TOP, WHITE GLOBE.-A variety of the purple top flat turnip, from which it originated. It is globular in form, and nearly as large as the Pomeranean White Globe; of beautiful appearance, of most excellent quality, and equally desirable for table or stock. It keeps well and is a fine market sort.
COW HORN, OR LONG WHITE.-This variety is carrot like in form, growing nearly half out of the ground, and generally slightly crooked. It is pure white except a little shade of green at the top. It is delicate and well flavored, of very rapid growth, and has obtained considerable favor as a market sort for fall and early winter use. It is increasing in demand every year.
LARGE WHITE NORFOLK.-A standard sort for field culture, and extensively grown all over the world for stock feeding. Shape spherical or slightly flattened; color white; often attains a very large size. The seed should be sown a little earlier than table sorts. It is allowed to stand out during the winter in the South and Southwest, where the tops are used for greens.
LARGE RED TOP NORFOLK.-A handsome, spherical or slightly flattened root, reddish-purple above ground, with small top. An excellent variety, grown both for Cow horn, or Long White. table use and stock.


POMERANEAN WHITE GLOBE.-IS one of the most productive kinds; in good, rich soil the roots will frequently grow to twelve pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth.


Pomeranean White Globe.
SWEET GERMAN.-This variety is very popular in many sections, notably so in the New England States. It partakes largely of the nature of the Ruta Baga, and should be sown a month earlier than the flat turnips. The flesh is white, hard, firm and sweet, and it keeps nearly as well as the Ruta Baga. Highly recommended for winter and spring use.

SEVEN TOP.-Cultivated extensively in the South for the tops, which are used for greens. It is very hardy, and will grow all winter but does not produce a good root and is only recommended for the tops.

## YELLOW FLESHED SORTS.

EARLY YELLOW MONTMAGNY.-An early sort; the most beautiful of the yellow fleshed varieties. Leaves medium sized, green, stained with purple; bulb oval; med-


Eably Yellow Montmagny.
ium sized, clear yellow, stained with bright purple at the top; flesh yellow, fine grained, sweet and tender. Among the earliest, and an exceedingly popular sort.

ORANGE JELLY, OR ROBERTSON'S GOLDEN BALL.-Undoubtedly among the most delicate and sweetest yellow fieshed turnips yet introduced. Not of large size, but firm, hard and of most excellent flavor. Keeps well, and is superior as a table variety.


LARGE AMBER GLOBE.-One of the best varieties, either for table use or for a field crop for stock. Flesh yellow, fine grained and sweet; color of skin yellow, with green top. Hardy, keeps well, a good cropper, and grows to a very large size. Very popular South.

PURPLE TOP YELLOW ABERDEEN.-Roots medium sized, round; flesh pale yellow, tender and sugary; hardy and productive, and keeps well. It is an old, esteemed variety, considered as approaching very nearly to the Ruta Baga in hardiness and firmness of texture.

## SWEDES, OR RUTA BAGAS.

Culture.-Should be the same as for the preceding varieties of turnips, except that seeds must be sown about one month earlier, as these require a longer time to mature.
SWEET RUSSIAN, OR WHITE RUTA BAGA.This variety is most excellent, either for the table or stock. It grows to a very large size: flesh white, solid, of firm texture, sweet and rich: keeps better than any of the pre ceding, and is very popular.
LAING'S PURPLE TOP, RUTA BAGA.-This variety grows very large, is early, an excellent keeper, and of fine flavor. Roots globe shape; skin purplish-red above ground

and yellow below; flesh yellow necks small; tops peculiar in that they are strap or entire leaved. An excellent variety in every way.
D. M. FERRY \& CO'S IMPROVED PURPLE TOP YELLOW RUTA BAGA.-The best variety of Swedish turnip in cultivation. Hardy and productive. Flesh yellow, of solid texture, sweet and well flavored; shape slightly oblong, terminating abruptly with no side or bottom roots: color deep purple above, and bright yellow under the ground: leaves small, light green; with little or no neck; the most perfect in form, the richest in flavor and the best in every respect.

D. M. Ferry \& Co's Improved Purple Top Yellow Ruta Baga

CARTER'S IMPERIAL PURPLE TOP RUTA BAGA.- A most excellent sort either for table use or feeding stock. Flesh yellow, solid, firm, sweet and rich. It is a hardy sort, yields heavily, with no tendency to long necks.

SUTTON'S CHAMPION RETA BAGA.-Roots large, spherical, purple on top: flesh yellow, tender and sweet; an excellent keeper and enormous yielder.

YELLOW SWEDE, OR RUTA BAGA.-Shape oblong: dull reddish color above ground, but yellow underneath; is hardier than the common turnip, and will keep solid till spring.

BANGHOLME RUTA BAGA.-A very superior variety. both in form and quality, and held in high estimation in many parts of England. Of large size, small neck, few or no side roots, and yields well. Flesh yellow, sweet and solid; skin yellow with purple top.

# Mimaile, manelicialal, POT HERBS. 

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

ANISE (Pimpinella Anisum). French, Anis. German, Anis.-A well known annual herb whose seeds, which have an agreeable aromatic odor and taste, are used for dyspepsia and colic and as a corrective of griping and unpleasant medicines. Sow early and thin to three inches apart in the row.
BALM (Melissa officinalis). French, Melisse. German, Melisse.-A perennial herb, easily propagated by division of the root or from seed. The leaves have a fragrant odor, similar to lemons, and are used for making balm tea for use in fevers, and a pleasant beverage called baln. wine. Plant early and thin to ten inches apart.

BENE (Sesamum Indicum). French, Bene. German, Bene.-Much used in the South, but too tender for the North. The seeds are used for food, and furnish an oil which does not easily become rancid, and is used for softening and whitening the skin. The leaves, if immersed in a tumbler of water, will convert it into a mucilaginous drink very beneficial in cases of cholera infantum, diarrhoea, etc. Do not plant until settled warm weather, and allow the plants to stand two feet apart.

BORAGE (Borago officinalis.) French, Bourrache. German, Borretsch.-A hardy annual, used as a pot herb, and for bee pasturage. The leaves immersed in water give it an agreeable taste and flavor. Sow in April and thin to eight inches apart. In some places this becomes a troublesome weed.

CARAWAY (Carum carui). French, Carvi. German, Kümmel.-Cultivated for its seeds, which are used in confectionery, cakes, etc., and the leaves are sometimes used in soups. If sown in August the plants will give a fair crop of seed the next season. Plant in drills two or three feet apart, and thin to six inches apart in the row.
CAT-MINT, OR CATNIP (Nepeta cataria). French,
Vepeta. German, Katzenkraut.-A hardy perennial, well Nepeta. German, Katzenkraut.-A hardy perennial, well known as a valuable mild nervine for infants. The plant
should be pulled up by the roots when in full flower; and dried in the shade. The seed may be sown either in the fall or early spring, in drills twenty inches apart.
CORIANDER (Coriandrum sativum). French, Coriandre. German, Koriander.-A hardy annual, cultivated for its seeds, which have an agreeable taste, and are used in confectionery and to disguise the taste of medicines. Sow early in the spring, and gather on a dry day, bruising the stems and leaves as little as possible, as when injured they have a disagreeable odor, which they impart to the seed.

DANDELION (Leontodon Taraxacum). French, Pissenlit. German, Lowenzahn. Improved Thick Leaved.Those who only know the dandelion as the persistent weed of our roadsides and lawns, know no more of its real value than one who has only seen the poisonous wild parsnip or carrot knows of the value of these vegetables. The improved variety makes one of the earliest and best greens in cultivation. For this purpose sow early in the spring, on very warm, rich soil, in drills eighteen inches apart; thin the young plants to five inches in the row, and cultivate well,

and they will be fit for cutting the next spring. It is also grown extensively for its roots; for this purpose sow hn September, and cultivate well during the fall and the following season, and the roots will be fit to dig in October.
DILL (Anethum graveolens). French, Aneth. German, Dill.-An annual cultivated for its seeds, which have an aromatic odor, and a warm, pungent taste. They are good for flatulence and colic in infants, and are sometimes added to pickled cucumbers to heighten the flavor. Sow early in spring, and keep clear of weeds.

HOREHOUND (Marrubium vulgare). French, Marrube. German, Andorn.-A perennial herb, with a strong, aromatic smell, and a bitter, pungent taste. It is a tonic, and enters largely into the composition of cough syrups and lozenges. Will thrive in any soil, but is stronger if grown on light, poor land.

HYSSOP (Hyssopus officinalis). French, Hyssope. German, Isop.-A hardy perennial with an aromatic flavor, and warm. pungent taste. It is a stimulant and expectorant and is used in asthma and chronic catarrh. The flowering summits and leaves are the parts used. It likes a dry, sandy soil, and the plants should be thinned to twelve inches apart.

LAVENDER (Lavendula vera). French, Lavende. German, Lavendel.-A hardy perennial, growing about two feet high. Its long spikes are used for the distillation of lavender water, or are dried and used to perfume linen. It does best in light, warm soil. The flowers should be picked before fading, and dried quickly.

ROSEMARY (Rosmarinus officinalis). French, Romarin. German, Rosmarin.-A hardy perennial with fragrant odor, and a warm, aromatic, bitter taste. May be easily raised from seed, but does not reach a size fit for use until the second season. The dried leaves deteriorate rapidly by keeping.

RUE (Ruta graveolens). French, Rue. German, Raute.A hardy perennial with a peculiar smell. The leaves are bitter, and so acrid as to blister the skin. It is a stimulant and anti-spasmodic, but must be used with great caution, as its use sometimes results in serious injury. It must not be suffered to run to seed, and does best on poor soil.
SAFFRON (Carthamus tinctorius). French, Safran. German, Saffran.-A hardy annual from Egypt, but which has become naturalized in many parts of the country. Cultivated for its flowers, which are used in dyeing, and to make the cosmetic powder called rouge, also to adulterate the valuable European Saffron, which is the flower of the Crocus sativus, and has strong medicinal properties. Sow early and gather the leaves before fading, drying them in the shade.

SAGE (Salvia officinalis). French, Sauge. German, Sal-bei.-A hardy perennial, possessing some medicinal properties, but cultivated principally for use as a condiment, it being used more extensively than any other herb for flavoring and dressing. Sow early in spring on very rich ground, cultivate often, and thin the plants to sixteen inches apart, Cut the leaves and tender shoots just as the plant is coming into flower, and dry quickly in the shade. The plants will survive the winter, and may be divided. If this is done they will give a second crop superior in quality to the first.

SWEET BASIL (Ocymum basilicum). French, Basilic. German, Basilikum.-A hardy annual from the East Indies. The seeds and stems are used in flavoring soups and sauces, and have the flavor of cloves.

SWEET FENNEL (Foniculum officinale). French,
Fenouil. German, Fenchel.-A hardy perennial. Theleaves Fenouil. German, Fenchel.-A hardy perennial. The leaves are largely used in Europe in soups, fish sauces, garnishes and salads, the seed being sometimes used in confectionery. Sow and cultivate like Anise.

SWEET MARJORAM (Origanum marjorana). French, Marjolaine. German, Marjoram.-A perennial plant, but not hardy enough to eudure the winter in the North. The young, tender tops are used green for flavoring, or they may be dried for winter use. Sow in drills as early as possible, and thin out the plants to ten inches.

SUMMER SAVORY (Satureia hortensis). French, Sarriette annuelle. German, Bohnenkraut.-A hardy annual, the dried stems, leaves and flowers of which are extensively used for flavoring, particularly in dressings and soups. Culture the same as that of Sweet Marjoram.

TANSY (Tanacetum vulgare). French, Tanaisie. German, Wurnkraut.-A hardy perennial plant from Europe, but growing wild in many parts of the country. The leaves, when green, have a peculiar, aromatic odor, which they lose in drying. Cultivated for its medicinal properties, which are those common to bitter herbs.

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

WORMWOOD (Artemisia absinthium). French, $A b$ sinthe. German, Wermuth.-A perennial plant of strong and fragrant odor, and aromatic, but intensely bitter taste. The leaves are used as a tonic and vermifuge, and also for fresh bruises. Is raised from seed and propagated by cuttings, or dividing the roots. A dry, poor soil is best adapted to bring out the peculiar virtues of this plant.

## FRUIT TREE SEEDS.

APPLE.-Apple seeds do not produce the same varieties, but generally give a hardy, though inferior sort, and upon these seedlings are grafted or budded the finer varieties. The seeds may be planted in the fall, in rows two feet apart, or they may be planted in early spring, but in that case the seed must first be mixed with damp sand and frozen, after which care must be taken that they do not become dry before plant ing. As soon as the plants are up, they should be well cultivated, and every effort made to secure a vigorous growth the first season. As soon as the plants are large enough they may be budded in the summer or grafted in the spring.
CHERRY, MAZZARD.- This is the stock used for standard trees. Success is much more certain if the seed is planted in the fall, as it is very difficult to keep it in good condition through winter. The general culture should be the same as for the apple, except that budding should be employed instead of grafting.
CHERRY, MAHALEB.- Used as stocks when dwarf trees are wanted. Culture same as the above.

PEAR.-Success will depend very largely upon having a deep, rich, moist soil, as this is essential to vigorous growth. Plant and cultivate like the apple, and bud when large enough. Every effort should be made to secure a rapid and vigorous growth from the first.
PEACH.-Plant three inches deep in nursery rows three feet apart, in the fall, or if delayed until spring, crack the pits and plant the kernels only. They should be large enough to bud the first season, and may be profitably set in orchards two years from planting.
PLUM.-The directions given for planting apples will also apply to plums, except the pits should be planted further apart in the row. The varieties raised from seed will be hardy, vigorous stalks upon which to graft the choicer sorts.
QUINCE.-Quinces generally produce the same variety from seed, but occasionally vary. The general culture and requirements of soil are the same as for the pear, except that they are not budded.

## FOREST TREE 쓴 HEDGE SEEDS.

Few investments made by our farmers will return a larger profit in the course of a few years than the planting of land now uncultivated, or cultivated at a loss, to forest trees. The time is coming, not only surely, but rapidly, when a few acres covered with our best forest trees will be of great value

## EVERGREEN TREE SEEDS.

The seeds of evergreen trees should be kept till time of sowing in a dry, cool place. As early in spring as the ground can be worked, the seeds should be sown thinly in beds of fine, sandy loam, raised about four inches above the general surface. The seeds can be raked in, or if very small, they may lie upon the surface and then be rolled in or patted with the back of the spade to firm the earth around the seeds. Then water very sparingly, and with a fine spray. The young plants are very apt to damp off, and need to be shaded from the hot sun and drying winds. A good shade can be made of laths nailed two inches apart to a light frame. This should be supported about eight inches above the seed bed in such a way as to be easily removed to allow cultivation and weeding. Do not allow the young plants to become choked by weeds, and let them remain one or two years before transplanting to permanent ground.
AMERICAN ARBOR VITAE (Thuja occidentalis).Grows to a small size, seldom over thirty feet high. Grows well under cultivation, and is one of the best for a hedge as a screen and wind break. It is best grown from seeds, which should be sown and the seedlings transplanted as directed above. They should be carefully watered when transplanted, and if a dry summer ensues, watering should be continued until the plants are well rooted.

SILVER FIR (abies pectinata).-An important timber tree, and grows to a large size. When young the trees are tender and easily injured by frost, but as they grow larger are entirely hardy.
HEMLOCK (Tsuga Canadensis).-One of the most beautiful of our native evergreen trees. Of graceful habit, with light, elegant and delicate foliage. The bark is used to an immense extent for tanning leather. It requires a light, dry soil, and should never be planted on a sliff clay, which will make the tree tender and liable to winter kill, though it is entirely hardy hundreds of miles north of our latitude.
SCOTCH PINE (Pinus sylvestris).-Very hardy, and growing surely and rapidly on nearly every variety of soil, forming a beautiful tree, and invaluable as a wind break. Prof. C. S. Sargent says: "It is the most valuable tree farmers can plant for screens and wind breaks about their fietds and buildings.'

WHETE OR WEYMOETH PINE (Pinus strobus) The most majestic and valuable of all our native pines, and has furnished immense quantities of the white pine lumber so well known throughout the country. It thrives best in a light sand with clay subsoil, and prefers plains and broad river valleys to higher lands. Except on high limestone soils, it should be planted largely where pine lumber is wanted.
NORWAY SPRECE (Abies excelsa).-Well known as one of our most beautiful evergreen trees. It is hardy, of rapid growth, and forms a dense, close screen, or hedge. About 20,000 seeds to the pound.

## DECIDUOUS TREE SEEDS.

With the seeds of deciduous trees only a little care is required in sowing at the proper season to insure success. Those with hard shells like the locusts should be planted in the fall or placed in boxes with sand and exposed to frost before planting, otherwise they may lie in the ground from one to three years without sprouting. If too late in spring to expose them to the action of frost, pour boiling water over the seeds and let it stand till cool, when a portion of the seeds will have swollen; pick these out and scald the rest again, continuing till all have swollen.

The seeds of the other deciduous trees on our list should be planted from the middle of April to the middle of May, in drills about two feet apart, and covered to the proper depth: about twice the diameter of the seed.

WHITE ASH (Fraxinus Americana).-Requires a moist, deep soil, on which it will grow very rapidly. It deserves special attention from those who wish to grow trees for timber, because its wood is very light, strong, elastic and durable, and is without an equal for making fork and rake handles, and many other agricultural implements, besides being largely employed in carriage building, cooperage and ornamental carpenter work Succeeds best from seeds, which should be planted like corn, where the trees are to stand, but not over an inch in depth. When grown singly it is very ornamental, forming a large, round head.

EUROPEAN ASH (Fraxinus excelsior).-Succeeds best in rather a warm climate; thrives upon the plains in deep soils, but does poorly on stiff clay or light, sandy soils. Its timber is valuable in carriage making and manufactures
BEECH (Fagus ferruginea). - Although not a very rapid growing tree, this makes one of the best for the lawn or park. The seeds should be sown as early as possible in the spring, in fine mellow soil pressed firmly over them. They germinate quickly and the young plants are quite hardy. They should be early transplanted to nursery rows and given plenty of room.

WHITE BIRCH (Betula alba).-Valuable for ornamental planting, and a favorite wood for shoe pegs, spools. bobbins, and similar small articles. The birch prefers a cool, humid climate, and is readily propagated from seed. Seeds thrive best on new ground. They scarcely admit of any covering, but if simply pressed into the ground with the feet they will grow. When one year old transplant into nursery rows. When two or three feet high set out the young trees where they are to remain.

BOX ELDER, OR ASH LEAVED MAPLE (Acer negundo).-This seems to succeed as well as any in the Northwest. The trees are said to reach a diameter of seven inches in six years. and to be exceedingly hardy not only to resist cold but drought and dry winds, and suffering less from insects than any other. One of the most desirable sorts for planting on timber claims.

HARDY CATALPA (Catalpa speciosa).-Quite distinet from and much hardier than the common catalpa. Scarcely a tree on our list can be so strongly recommended as this for planting on the vast treeless prairies of our Western States. It is of very quick growth, has proven itself hardy as far north as Dakota, and is one of the most durable timbers known, lasting in many well authenticated instances nearly or quite a century

Catalpa seeds can be sown dry on a still day, but the better way is to wet the seeds for a few hours before planting, and mix them with a little sifted soil to prevent their sticking together. They will germinate more promptly for the soaking they have received, and will not be so likely to be blown away while being sown. Sow in April or May, in well prepared loamy soil, in rows four feet apart, sowing seed thickly in the rows, covering half an inch deep and firming the soi well over the seeds. Thick sowing is desirable, as a dozen little plants together can force their way through the surface easier than singly, and if they are too thick they can be thinned and transplanted on a damp day as easily as cabbage plants. Cultivate well during the summer, keeping them free from weeds. In the fall or following spring the seedlings can be transplanted where they are to remain Four feet apart each way is the proper distance. and they should be cultivated about like corn for two seasons There are from 16,000 to 20,000 seeds to the pound. As an orna mental tree the Catalpa appears to the best advantage planted in small groves.

EUROPEAN LARCH (Larix Eluropaca) - Grows to a large size, and makes excellent timber. Planted on lands of very little value for ordinary farming, it improves instead of impoverishing them, as the annual crop of leaves deposits
more nutriment than the tree takes up; besides the yield of timber in a series of years would prove a very profitable investment. Seeds should be sown in a half shady situation.
EUROPEAN LINDEN (Tilia Europoca).-A great favorite for ornamental planting in Europe. Its wood is very white, light, not liable to crack, and much prized for cabinet work, and the panels of carriages. It should be planted by work, and bee keepers, as no flower of its size yields better honey or in greater abundance.

HONEY LOCUST (Gleditschia triacanthos).-On account of its rapidity of growth and durability of the timber, we regard this as one of the most valuable of our native trees. It is not so liable to injury by the borer as the common Locust, and does not sprout from the root to a greater extent than do most of our forest trees. Without the preparation recommended above, the seeds may lie from one to three years in the ground without sprouting. Take up and heel in or cover the plants in the fall, and set out the next spring. After the first season, they are perfectly hardy. One pound contains about 2,300 seeds.

YELLOW LOCUST (Robinia pseudo-acacia).-This tree grows so rapidly that railroad ties may be cut from it ten years from the planting of the seed, while the durability of its timber is well known, fence posts of it having stood for sixty years. Culture same as the above. One ounce contains about 1,300 seeds.
WHITE MULBERRY (Morus alba).-Desirable for feeding silk worms. Grows readily and rapidly from seeds, which should not be covered too deep, as they are quite small. It delights in a warm, dry soil, and will succeed in almost any place that will produce a good corn crop.
RUSSIAN MULBERRY.-Introduced into this country by the Mennonites, and by them extensively planted for silk worm culture. Of rapid growth, resembling the apple tree in habit, with a grayish bark and drooping branches. It is very easily cultivated and, kept in dwarf form, makes a fine hedge and wind break. It bears very young and, it is said, every year. The fruit is similar to the blackberry, varying in flavor from sub-acid to sweet. In cold regions especially, this should prove a very valuable variety for its timber, shade and fruit. It is said to reproduce itself exactly from seed, and as our seed is direct from the Mennonite colony, it can be depended on as true and reliable.

OSAGE ORANGE (Maclura aurantiaca).-How то Plant, Cultivate and Make a Hedge.-The Osage Orange is a native of Texas, but can be grown and cultivated advantageously in most parts of the United States. The ground should be thoroughly pulverized by either plowing or spading, before the seed is planted. The surest way is to sprout the seed before planting, as it is very slow to germinate when put into the ground without being sprouted, sometimes taking a whole season to come up. To sprout the seed put into a vessel and cover with warm (not hot) water. Keep the vessel in a warm place, and change the water once a day. Let the seed soak about five or six days, after which pour off the water and cover the vessel with a cloth. Keep in a warm room and stir the seed occasionally. In about one week more they will begin to sprout, and are ready for planting. A pound of seed, if properly managed, will produce 5,000 plants. The seed should be sown in April or May, with twelve good seeds to the foot, in drills twenty inches apart. They should be kept free from weeds, as the young plants are very tender and delicate until they are from three to five inches high. They can be set out in permanent hedges the following spring, in rows, placing them six inches apart in the row, but should be cut back to within an inch of the ground before they are set out; and to make a thick hedge it will be necessary to cut back the first three years' growth, leaving only about eight inches of the season's growth. This system must be pursued every season until the hedge is of the desired height and form. Under proper treatment a good hedge that will turn all kinds of stock can be grown from seed in from three to four years.

## CLOVER SEEDS.

M AMMMOTH, OR LARGE RED (Trifolium pratense).-It grows five or six feet high, but its stalks are so coarse and large that stock will eat only the leaves, but by its judicious use lands which have been exhausted can be reclaimed, as it will grow where the common clover will fail. Sow at the rate of about eight pounds per acre. Sixty pounds per bushel.
MEDIUM RED, OR JUNE (Trifolium pratense). -This is by far the most important of all the varieties for the practical purposes of agriculture. Sow in spring or fall; and when no other grasses are
used, at the rate of eight to ten pounds per acre, more being required on old, stiff soils than on new and lighter ones. Sixty pounds per bushel.

ALSIKE, OR SWEDISH (Trifolium hybridum).-This valuable variety is fast gaining great popularity. It is the most hardy of all the clovers; perennial. On rich, moist soils it yields an enormous quantity of hay or pasturage, and may be cut several times in a season, but its greatest value is for sowing with other clovers and grasses, as it forms a thick bottom and greatly increases the yield of hay, and cattle prefer it to any other forage. The heads are globular, very sweet and fragrant, and much liked by bees, which obtain a large amount of honey from them. Sow in spring or fall, at the rate of six pounds per acre, where used alone. Sixty pounds per bushel.
CRIMSON TREFOIL, OR SCARLET ITALIAN (Trifolium incarnatum). This is an annual variety, in common use in Italy and the south of France for feeding green. The yield in fodder is immense, and, after cutting, it at once


## Crimson Trefoil, or Scarlet Italian.

commences growing again, and continues until severe, cold, freezing weather. It grows about one foot high; the roots are nearly black; leaves long; blossoms long, pointed and of a very deep red, or carmine color. Makes good hay. Sow in April or May, eight pounds of seed per acre.

WHITE DUTCH (Trifolium repens).-A small, creeping, spreading, perennial variety, valuable for pasturage and for lawns. It accommodates itself to a variety of soils, but prefers moist ground. In conjunction with blue grass, it forms the most nutritious food for sheep or cows. Sow in spring, at the rate of six pounds per acre; or when used with other grasses, half that amount will be sufficient.

LUCERNE, OF ALFALFA (Medicago sativa) Where this succeeds, it is the most valuable of all the clovers. It is more difficult to secure a good stand, as it requires a very fine, mellow soil, and some protection the first year, but when once established it will produce a profitable crop for from five to twelve years. It yields a prodigious amount of green fodder for cattle, and should be cut when first commencing to bloom, when it pushes out fresh shoots and the aftergrowth is something wonderful. In the driest and most sultry weather, when every blade of grass withers, Lucerne is as fresh and green as in spring, because the roots go down to the moisture in the ground. Although such a prodigious yielder, it does not exhaust the soil, but rather improves it. It should not be sown on compact, clay soils, even with a light subsoil.

BOKHARA (Melilotus alba) Sweet Clover.-This is exceedingly valuable as pasturage for bees. It is occasionally found growing wild by the roadside in company with the more common sweet clover (Melilotus officinalis), and may be distinguished from it by its white flowers and less coarse and more leafy stems.

## GRASS SEEDS.

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

TALLOAT, OR MEADOW OAT GRASS (Arrhenatherum avenaceum).-This is sometimes sold at an exorbitant price under the name of "Evergreen grass." It is admirably adapted to sandy, gravelly or dry soils, as its roots penetrate deep down into the subsoil, and for this reason, it is sown extensively throughout the west to take the place of the prairie grass. Its roots are perennial, and in the South the tops are evergreen, where it yields enormous crops, being cut for green soiling as high as four or five times in favorable seasons. It grows very rapidly, being fit to cut as early as
orchard grass. It may be sown in the spring and cut the same season, but does much better if sown in September or October. Not less than two bushels (thirteen pounds per bushel) should be sown to the acre. The hay, if cut early, is of excellent quality.

ORCHARD GRASS, OR COCK'S FOOT (Dactylis glomerata). -One of the most valuable grasses on accouut of its quick growth and valuable aftermath. It is ready for grazing in spring two weeks sooner than most grasses, and When fed off is again ready for grazing in a week, and will continue green when other grasses are withered by dry weather. It is palatable and nutritious, and stock eat it greedily when green. It has a tendency to grow in tufts, and so does better if sown with clovers, and as it ripens at the same time the mixed hay is of the best quality. For grazing it has no equal, and should be used more than it is. When sown alone, two bushels are required per acre; if sown with clover, half that amount. It is perennial, and will last for years. but its habit of growth unfits it for lawns. Fourteen pounds per bushel.

RED TOP (Agrostis vulgaris). -In some sections this is called Rhode Island Bent Grass. In Pennsylvania and states farther south it is known as Herd's Grass, a name applied in New England and New York to Timothy. It is a good, permanent grass, standing our climate well, and makes a good pasture when fed close. It is valuable for low, wet meadows, not being injured by somewhat prolonged overflows, and it yields a large return of excellent hay. When sown alone, two bushels per acre are required, sown in spring or fall. Fourteen pounds per bushel.

FOWL MEADOW, OR FALSE RED TOP (Poa sero-tina).- It yields well when sown on low, moist land, and will not suffer if not cut at the exact time. It can be mowed almost any time from July to October. When three feet high it falls down, or lodges, and after a little time every joint puts forth new branches. The stalk is always sweet and tender, and cattle and sheep are fond of it. It thrives best when mixed with other grasses. Though resembling Red Top in some respects, it is distinct, and we think superior in every respect. Requires about the same amount of seed per acre as Red Top, sown in spring or fall. Twelve pounds per bushel.

KENTLCKY BLUE GRASS (Poa pratensis). -This is known in some sections as Green Meadow Grass, and June Grass, but should not be confounded with Poa compressa, called by some June Grass, or Wire Grass. This species produces the most nourishing food for cattle of any, and till a late period in winter, and in the South abundant food throughout the winter. In conjunction with white clover, it forms the finest and closest of lawns; for this purpose an extra quantity of seed should be used, say four bushels of Blue Grass and six pounds of White Clover per acre. If sown by itself for pasturage, two bushels will be required; sown early in the spring, or in October or November. Fourteen pounds per bushel.

PERENNIAL RYE GRASS (Lolium perenne).-A very valuable variety for permanent pasture; very nutritious, and stock are very fond of it. Succeeds well on almost any soil, but is particularly adapted to moderately moist or irrigated lands. Large quantities are raised in England, and nearly all of Europe. It is also largely used for lawns, in conjuction with other grasses. Sow one and a-half to two bushels per acre, in the spring. Twenty pounds per bushel.

## MEADOW FESCUE, OR ENGLISH BLUE GRASS

 (Festuca pratensis).-A perennial grass from two to four feet high, with flat, broad leaves. This is one of the standard European grasses, and cattle are very fond of it, both green and dry. It needs rich ground, and it succeeds well on prairie soil, and is an excellent pasture grass to take the place of the wild grasses, as it yields a large amount of early and late feed. It also makes excellent hay, and is certainly worthy of more general cultivation.WOOD MEADOW GRASS (Poa nemoralis).-Grows from one and a-half to two feet high; has a perennial creeping root, and an erect, slender, smooth stem. Its chief value is in that it will produce a good crop of hay in moist, shady situations, where it frequently grows quite tall. Cattle are fond of it; it is succulent and nutritious, and is, perhaps, the best variety for sowing in orchards, under trees, and shaded situations, either for hay or pasturage, and for parks and pleasure grounds. About fourteen pounds per bushel. Two bushels per acre.

SWEET VERNAL GRASS (Anthoxanthun odoratum). -One of the earliest of grasses in spring, as well as the latest in autumn, and about the only grass that is fragrant. As a pasture grass, mixed with other species, it is valuable on account of its earliness, and mixed with blue grass and white clover, it is an invaluable adjunct for lawns, present ing a beautiful appearance, and exhaling a delightfnl frag. rance when in blossom. Should form a part of the mixed grasses in every lawn and dooryard. About ten pounds per
bushel.

COMMON MILLET (Panicum miliaceum).-Requires a dry, light, rich soil, and grows two and a-half to four feet high, with a fine bulk of stalks and leaves, and is excellent for forage. For hay, sow broadcast, one-half bushel per nere, from May 1st to August 1st. For grain, sow in drills, one peck to the acre, and not later than June 20th. Fifty prunds per bushel.


GERMAN, OR GOLDEN MILLET.-An improved variety, medium early, growing three to five feet high. The heads are closely condensed, though the spikes are very numerous. The seeds are contained in rough, bristly sheaths, and are round, golden yellow, and beautiful in appearance.
From close observation during the past few years, the fact has been established beyond doubt, that seed of the German, or Golden Millet, grown in southern latitudes will produce a much larger yield of hay than from seed grown in northern or western sections of the country, and for that reason is far better for farmers to sow. We have a good stock of southern grown seed, and knowing its value confidently recommend it. Bear in mind that to the farmer southern grown seed is worth double that of northern or western grown. Northern and western grown seed is degenerated and hybridized with other millets.

JOHNSON GRASS (Sorghum halapense).-This is one of the most valuable forage plants of recent introduction, and is already very popular in the Southern States. It is perennial, a rapid grower, very nutritious, being eagerly devoured by all kinds of stock; comes early in the spring, grows until the frosts cut it down in the fall, stands the drought better than any grass, having long, cane like roots which penetrate the soil for moisture; superior both as a grazing and hay grass. The best results follow sowing the seed in August and September, enabling the seed to get a good root by fall, and forming a better turf the following season. Sow with clean seed, broadcast, at the rate of one bushel per acre, and cover with a light brush, or sow just before a heavy rain. Three good crops the following season will be the result if the season is farorable. Sowing in the spring does well, but the crop would not be as heavy the first year. The seed we offer is of this season's crop, and has been well recleaned. One bushel will sow an acre
HCNGARIAN GRASS (Panicum Germanicum).-This is a species of millet, growing less rank, with smaller stalks, often yielding two or three tons of hay per acre. It is very popular and valuable with those who are clearing timber lands. Like the millet, it is an annual, and requires to be sown every season, but will produce a larger return than almost any other crop. Sow and cultivate like millet. Forty-eight pounds per bushel.
EXTRA FINE MIXED LAWN GRASS (Central Park Mixture). The essentials for a fine lawn are proper drainage, a careful preparation of the soil, which should be made as fine and light on the surface as possible, thorough rolling. and a selection of the seeds of such grasses as will present a luxuriant verdure from early spring till late in autumn: and then, frequent mowings with a lawn mower. However much care is bestowed on the soil and seed, no lawn will be beautiful without frequent mowing and rolling. Too much care cannot be bestowed upon the selection of grasses, as some varieties are the most luxuriant in spring. others in sumseer, others again in autumn, and a combination of the proper sorts is required for a perfeet. carpet like lawn. We have given much thought and made many experiments to secure the best mixture, and think our Central Park Mixture is the best possible mixture for permanent lawns, resisting the severe droughts of our climate better than any other. It may be planted early in spring, or fall, and should be sown at the rate of from sixty to eighty pounds to the acre, much more being required than for hay or pasturage. If sown in the spring, sow as early as possible, making the surface ver fine and smooth, then raking it over and sowing the seed just
before a rain, which, if the surface has inst been raked, will
cover the seed sufficiently. If the expected rain does not come, cover by rolling with a light roller. If sown in the fall, sow before the autumn rains have ceased, and before very cold weather give the young grass a light dressing of manure. One pound of this mixture is sufficient to sow a space $30 \times 20$ feet, or 600 square feet. Kentucky Blue Grass in conjunction with White Clover forms one of the finest and closest of lawns. For this purpose, use four bushels of Blue Grass and about six pounds of White Clover per acre.

## MISCELLANEOUS FARM SEEDS.

## MICHIGAN WINTER WHEAT.

One of the ways in which farmers allow the profits, which should come from their business, to slip through their fingers is in want of attention to the quality of their seed grain. Most farmers think that there is not enough difference in the different varieties of seed wheat to warrant the paying of an extra price for a variety, even if it is decidedly superior, and better suited to their soils, but repeated tests by the different experimental stations, and by private growers, have proven conclusively that there is a difference of as high as fifteen to twenty bushels per acre in yield of grain, due solely to the quality of the seed used; for this reason we feel that we are doing our customers a kindness in urging them carefully to study and experiment with the new and superior seed grains we offer.

MICHIGAN BRONZE (Mediterranean Hybrid, or Diehl Mediterranean). -We are gratified with our success in introducing this wheat, and in the uniformly favorable reports which come to us in regard to it. It certainly seems to be the farmers' wheat, and we believe it the most profitable sort in cultivation. It is a cross between the old Diehl and the Red Mediterranean, and the head is of the shape of the Diehl, but with short beards, while the plant retains the hardiness and productiveness of the Mediterranean, and the grain cannot be equaled in milling qualities. The plants stool out well. The straw is of moderate length and size, but very stiff, and turns bronze at maturity; the berry is bright amber color, medium sized and handsome. We recommend this variety as the surest and best for ordinary farms and conditions.

BARLEY, COMMON.-Barley succeeds best on lands more sandy and lighter than those adapted to wheat. It is sown in the spring, and can be grown farther north than any other grain. Sow from two to two and a-half bushels per acre. Weight, forty-eight pounds per bushel.

BARLEY, HULLESS.-There are several varieties of Barley in which the grain shells out of the chaff like wheat. One variety is also beardless, but our experience with it is that it is a very unreliable cropper. That we offer has a smaller grain, but yields about as well as the Common Barley, and is the sort so largely grown by Bohemians and others for making barley bread.
RYE, FALL OR WINTER.The time for sowing is from the middle of August to the last of September. One plowing is given, and the seed sown broadcast at the rate of one and a-half bushels per acre, and dragged in. Harrowing and rolling in the spring are recommended. If cut before fully ripe, the grain makes more and better flour. If intended for seed, it should be fully ripe. Sow some rye among standing corn, hoeing it in, leaving the ground level as possible, and after the corn is removed, rolling the ground. It succeeds best on sandy soils.

RYE, SPRING.-Although this grain is often planted by farmers especially for the paper makers, who prefer it to any other, its principal value is as a "catch" crop, to sow where winter grain has failed. The straw is shorter and stffer than that of the winter variety, and is always easily secured, while the grain, although smaller, is of equal value.
BUCKWHEAT, COMMON. - Buckwheat should be sown about the 20 th of June, broadcast, at the rate of from one to three pecks per acre. The average yield is from twenty-five to thirty bushels per acre. It should be threshed as soon as dry, on the ground or barn floor. If allowed to stand in mass, it quickly gathers moisture.

BUCKWHEAT, JAPANESE.- It is rare that a new grain is introduced which has so decided and evident merit as this. The plants are very large and vigorous, making a full

stand when other sorts fail entirely. It matures its seed early, and the grain is much larger and at the same time has a thinner hull than the Common or the Silver Hull. We can recommend this as a great acquisition.

BUCKWHEAT, SILVER HULL.-This improved variety is much better than the old sort. It is in bloom longer, matures sooner, and yields double the quantity per acre. The husk is thinner, the corners less prominent, and the grain of a beautiful light gray color. The flour is said to be better and more nutritious.

FIELD PEAS (Pisum sativum). -The varieties of field peas have never been very numerous, nor are they much increasing. The kinds mostly used are the Golden Vine, Blue Prussian, Common White and Common Blue. Field peas, in general, may be sown broadcast or in drills, after the manner of field beans, about three bushels per acre.

SPRING VETCHES, OR TARES (Vica sativa).-A species of the pea, grown extensively in England, and to a considerable extent in Canada, for stock, but not much used in the States. Culture same as field peas, two bushels per acre.

FLAX (Linum usitatissimum). -Sow late enough in the spring to avoid frost, and early enough to secure the early rains. A fair average quantity of seed to be sown on an acre is one-half bushel, when cultivated for seed; if for the fibre, a larger quantity should be sown. Cut before quite ripe, and, if the weather be dry, let it lie in the swath a few hours, when it should be raked and secured from the weather: thresh early in the fall and in dry weather.

HEMP (Cannabis sativa). - If raised for manufacturing, must be sown broadcast, at the rate of one-half bushel to the acre; if for seed, should be planted in hills four feet apart, and the plants thinned out to three or four most vigorous stems in each hill.

## BIRD SEEDS.

CANARY SEED (Phalaris canariensis).
HEMP SEED (Cannabis sativa).
MAW (Papaver rhoeas).
MILLET SEED (Panicum miliaceum).
RAPE SEED (Brassica napus).
LETTUCE SEED (Lactuca satıva).

## A SELECT DESCRIPTIVE LIST

# -op- <br> CHOICE IMPORTED FLOWER SEEDS 

## WITH BRIEF HINTS ON SOWING AND CULTIVATING.

MANY who do not meet with the success they expected in the culture of a general list of Flowers, attribute the difficulty solely to the seed, overlooking the important fact that nearly the entire range of Flower Seeds requires careful and particular treatment, and the further fact that the treatment and conditions which with one variety will produce the most satisfactory results, may utterly blight another.
To ensure success, the conditions and requirements of the several species as to soll, moisture, heat. light, etc., should be studied and then observed in culture. We feel sure that the pleasure resulting from a large and varied collection of Flowers will amply compensate for the time and care given to the subject.

SELECTION OF VARIETIES.-Success in flower culture depends quite largely upon a judicious selection of rarieties. Every sort we offer is, under certain conditions, attractive and desirable. but some of them. while exceedingly beautiful under favorable circumstances. will be most unsatisfactory and little better than weeds under others: we therefore urge our friends to study carefully the following pages before ordering, that they may select the sorts best suited to their wants.

THE SOIL.-Another great object to be considered is the soil in which flower seeds are to be sown. The soil best adapted to flowering plants generally, is a light, friable loam, containing a sufficient amount of sand to render it porous. A great many varieties will live in almost any kind of soil. except it be extremely dry, calcareous, or of a stiff. heary character; still. to give them a fair chance for development. some little pains shuuld be taken in adding to the soil. as much as possible, what may be wanting in it. Most flowers are better if produced on plants of vigorous growth, so the greater portion of the garden should be prepared by deep digging, thorough pulverization, and liberal enriching with large quantities of uell rotted manure. On the other hand. some sorts do best on rery poor soil. so a portion of the garden should be left without enriching at all. As the process of germination is shorter or longer in the different kinds of seeds, the patience of the cultivator is often sorely cried with seeds of a slowly germinating character; the patience of a deroted florist, however, is never exhausted in these manipulations, and the certainty of his final success repays him fully for the trouble.

DERATION AND HARDINESS.-For the purpose of giving general cultural directions. flowering plants may be livided into several classes based upon their duration and hardiness: but it is evident that such a dirision could only be correct for a certain latitude and for certain conditions. and while the classification we have followed applies generally to the Central and Northern States. yet some which are classed as half-hardy mas be tender in the North or in unfarorable exposures, and quite hardy in the South or in exceptionally favorable situations.

HARDY ANNCALS include those plants which complete their growth the first season and then die, and being native of the same latitude, or if native of a warmer climate, derelop so rapidly that if the seed is sown in the open ground the plants will come to perfect maturity before they are liable to be killed by frost

Cturcre. - Carefully study the descriptions and cultural directions of the variety, and select suitable soil, and note the distance apart the plants need to be for perfect development. Then make the ground very mellow, free from lunips and smooth, and provide a board about one-half inch thick, and two or three feet long, and about three inches wide. Press the edge of this board into the soil so as to make a groove as deep as the seed is to be planted. remembering that more seeds of this class are lost through too deep planting than from any other cause, and that generally seeds should not be covered to a depth greater than two or three times their diameter. Scatter the seed along the groove. allowing from four or five of the larger to fifteen or twenty of the smaller seeds to the space each plant is to occupy. Cover by pinching the earth together over the seed, turn the board flatwise and press the soil down firmly and evenly. Nark each end of the row with a small stick, and repeat at a suitable distance. By this method the seed is covered to a uniform depth. and the young plants being in rows are more easily seen and less liable to be pulled up as weeds, while a little care in thinning will prevent any appearance of stiffness.

HALF-HARDY ANNCALS include such annual plants as. from being natives of warmer climates, or of slow development. need to be forwarded in the spring by means of artificial heat, either in green-houses, hot-beds, or the dwelling couse, in order to come tc perfection.

Ctluture.- Notice in the description of the varieties the soil best suited to the sort. Fill shallow boxes to within one-half inch of the top with light. friable earth, the composition of which is suited to the wants of the particular plant. The earth should be in such a condition of moisture that when pressed together in the hand it will form a ball whieh will retain its shape, but which will fall into fine earth again upon being pinched or struck: Press this down evenly and firmly, making the surface as smooth as possible, and then form grooves with a short, thin board in the same way as directed fer hardy annuals, taking great pains that the grooves are not too deep. Drop in the seed and cover with earth, which should be pressed evenly and firmly over the seed. Now water thoroughly, but carefully, so as not to wash out the seed, and keep in a warm place in full light, but not where the sun will shine directly upon them so as to dry off the surfaee too rapidly and necessitate too frequent watering. Watch them carefully, watering as seldom as possible. but keeping the soil alviays moist and never wet. As soon as the plants begin to appear, place in full sunlight and give plenty of air. taking great care that the plants never suffer from the want of sufficient water or from an excess of it. When the plants have made three or four eaves, or begin to crowd each other, remove to other boxes or pots, and set in the open ground as soon as danger of frost is over. Most of the varieties of both hardy and half-hardy annuals mature so rapidly that better results will be obtained if several sowings at different dates are made, thus securing a succession of bloom.

TENDER, OR GREEN-HOUSE ANNUALS are such as, being natives of hot climates, not only reqwire a longer season, but also need to be protected from the cold winds and rains which are so frequent in our climate, and so cannot be set out of doors except during the hot months.

CuLTLRE. - This is much the same as that for half-hardy annuals except that the seeds are often so fine that they cannot safely be covered with earth. but are simply pressed into the soil and the utmost pains must be taken that they do not become too dry, nor are over watered. A single hour of bright sunshine will often so dry the surface as to kill the seeds which are just starting, and on the other hand a slight excess of water will cause them to rot, and it is to mistakes or neglect in watering that nine-tenths of the failures with this class of seeds are due.

HARDY BIENNIALS AND PERENNIALS are such plants as do not bloom, or blossom imperfectly, the first season, but live through winter with little or no protection. and come into full bloom the second season, after which the biennials die. while the perennials continue to live and bloom from year to year. This class includes many of our finest flowering plants, yet they are often neglected because not blooming the first year from seed: but this long waiting for bloom may in many cases be avoided by treating the seed as half-hardy annuals and starting them sufficiently early to form large, strong plants by the time they can be set out in the spring. When this is not done they may be sown in beds as directed for hardy annuals, and the plants set out in the fall at suitable distances.

HALF-HARDY AND TENDER PERENNIALS are such as must be kept over winter in the cellar or greenhouse. The seeds may be treated like half-hardy or tender annuals.

Nine-tenths of the failures in flower culture come from improper treatment of the seeds and young plants, and we urge every purchaser of our seeds to study carefully the cultural directions printed on each package, and keep in mind the following golden rules for sowing tlower seeds:

Make the surface as fine and smooth as possible
Do not plant any of the seed when the ground is at all wet.
Cover each lot of seed to a uniform depth, which should never be more than three or four times the diameter of the seed.
Press the soil firmly over the seed.
Plant in rows so that the young plants can be easily seen, and pull up all weeds which spring up between the rows the day they appear, but do not pull plants out of the row until you are sure they are weeds.

# WE OFFER THE FOLLOWING <br> LIBERAL INDUCETMENTS 

## TO CLUBS, OR THOSE WHO WISH TO PURCHASE FLOWER SEEDS IN QUANTITY

These Low Rates Apply only to Seeds in Packets, but the Seeds will be Sent by Mail, Post-Paid.
SEND US $\$ 1.00$, AND SELECT PACKETS TO THE VALUE OF $\$ 1.15$.
SEND US $\$ 2.00$, AND SELECT PACKETS TO THE VALUE OF $\$ 2.35$.
SEND US $\$ 3.00$, AND SELECT PACKETS TO THE VALUE OF $\$ 3.60$.
SEND US $\$ 4.00$, AND SELECT PACKETS TO THE VALUE OF $\$ 4.85$.
SEND US $\$ 5.00$, AND SELECT PACKETS TO THE VALUE OF $\$ 6.15$. SEND US $\$ 10.00$, AND SELECT PACKETS TO THE VALUE OF $\$ 12.50$.

SEND US $\$ 20.00$, AND SELECT PACKETS TO THE VALUE OF $\$ 26.00$.
All Flower Seeds Sent Free by Mail on Receipt of Price.
pere The Figures at the Right Opposite Each Variety Denote the Price, in Ceits, Per Packet.

## ABOBRA.

A rapid growing, climbing, half hardy, tuberous rooted perennial gourd, whose dark green foliage and bright scarlet fruit form a striking contrast. Height fifteen feet.
Abobra viridiflora. $\qquad$ ...

## ABRONIA.

A charming trailer with fragrant verbena like flowers, in bloom the entire summer. Half hardy annual.


Abronia Umbellata.
Abronia umbellata, delicate lilac, white centre
" arenaria, waxy yellow, fragrant
" mixed, above mixed. $\qquad$ ... ..

Very popular, perennial, green-house shrub, with bell shaped, drooping flowers, which are borne in profusion nearly the entire year. Well adapted to house culture, and desirable for bedding out in the summer. There are several varieties, the flowers of which vary from pure white and yellow to deep orange and crimson, streaked with yellow. Height two to three feet.
Abutilon, finest mixed. $\qquad$ ... $\qquad$

## ACROCLINIUM-(Everlasting).

Very pretty, half-hardy annual, with rose and white daisy iike flowers. These are "Immortelles". which bloom in August and September, and are fine for winter bouquets and wreaths. Height one foot.
Acroclinium album, pure white............................ 5
"t roseum, light rose; good for mixing.......................... 5
" ${ }^{6}$ " double .................................................... 25
" mixed............................ 5

## ADLUMIA.

This is sometimes known as Mountain Fringe, Wood Fringe and Alleghany Vine. A beautiful and graceful climber and profuse bloomer. Hardy biennial; height fifteen feet.
Adlumia cirrhosa, white and pink. .10
ADONIS FLOWER (Pheasant's Eye).
Foliage pretty, delicate, many parted. Hardy annual; one foot high.
Adonis autumnalis, dark blood red, fine.

## AGAPANTHUS (African Lily).

Bears large heads of beautiful blue flowers on stems three feet high; will flower in two years from seed; one-half hardy perennial.
Agapanthus umbellatus.
.15


## AGERATUM.

Very profuse and constant bloomers; excellent for cut flowers and in borders. Hardy annual, easily grown.
Ageratum Mexicanum, light blue $\qquad$
" Imperial Dwarf White.................................... 5
" Tom Thumb, dwarf blue, desirable for edging.... 5
" Lasseauxi, rose colored . ........................................ . . 10
" conspicuum, valuable for winter; white....................
" mixed, seeds of the above varieties mixed............. 5

## AGROSTEMMA.

Very useful for cutting for bouquets, and pretty in masses in beds. The annual variety is known as Rose of Heaven; the perennial as Rose Campion. One and a-half feet high: hardy.
Agrostemma coronaria, crimson; perennial...............
coeli-rosa, rose, white centre; annual.
AGROSTIS-(Ornamental Grass).
Much used in connection with everlastings, for winter bouquets. Grows easily in any common garden soil. Hardy annual; about one and a-half feet high.


Agrostis Nebulosa.
Agrostis nebulosa, fine and delicate.

## ALONSOA.

Properly green-house plants, but bloom finely in open ground when treated as tender annuals. Flowers remarkably brilliant; height one and one-half feet.
Alonsoa grandiflora, deep scarlet.
" Warszewiczii, bright crimson..
.6 mixed, seeds of the above varieties mixed................... . 5

## ALYSSUM.

Alyssum, sweet (maritimum), flowers pure white in racemes, and of a peculiar, delicate fragrance. Most effective in masses, with plants one foot apart. Useful in all kinds of small bouquets. Hardy annual; grows one foot high...................................
(saxatile), flowers brilliant golden
" golden (saxatile), flowers brilliant golden showy in masses. Hardy perennial; height one foot..

## AMARANTHUS.

Valuable for its variety of handsome foliage, whether grown in the conservatory or garden.


## Amaranthus Melancholicus Ruber.

Amaranthus melancholicus ruber, beautiful blood red foliage. Hardy annual; two and a-half feet high..
" tricolor, leaves yellow, red and green; well known as "Joseph's Coat." Hardy annual; two feet high.... 5
** salicifolius, two and a half to three feet high. Leaves beautifully undulated, varying from green to bronze, and later to a bright orange red color... 10


Amaranthus Henderi, beautiful drooping foliage, richly colored in many shades............................. 10

AMMOBILM-(Everlasting).
Valuable for forming winter bouquets in connection with grasses and other everlastings. Hardy annual; height two feet
Ammobium alatum, pure white

## AMINELOPSIS.

These are deservedly among the most popular vines grown for covering walls, arbors, etc. Hardy perennial climbers.

Ampelopsis quinquefolia, Virginia Creeper, or American Woodbine
.10
" Veitchii, Japan Ivy, or Boston Ivy, leaves three parted; will cling to the smoothest wall.............. 15

## ANAGALLIS.

Interesting plants of easy culture, and remarkable for the beauty of their flowers. Well adapted to rock work or borders. Half-hardy annual; six inches high.
Anagallis, mixed..

## ANCHCSA.

Peculiarly adapted to shady situations, succeeding where many plants would fail for want of sunshine. Two or three feet high.
Anchusa Italica, intense blue flowers freely produced; fine for bees. Hardy perennial.

## ANEMONE-(Wind Flower).

Among the earliest and brightest of our spring flowers. The colors run through several shades, and the eyes are frequenty of a different color. Hardy perennial.


Anemone coronaria, six inches.
ANTIRRHINCM.-(See Snapdragon.)
AQUILEGIA.-(See Columbine.)

## ARIBIS.

Among the earliest blooming plants, and very useful for rock work, edgings, etc. Culture same as for Anemone. Hardy perennial; nine inches high.
Arabis Alpina, pure white..

## ARGEMONE-(Prickly Poppy).

Flowers large, brilliant and resemble the single poppy. Hardy annual; two feet high.
Argemone grandiflora, white, large.......................... 5
"6 Mexicama, bright yellow
" Hunnemanni, carmine and yellow.................................
" mixed, all best colors..

## ARISTOLOCHIA-(Dutchman's Pipe).

A beautiful and rapid cllmber, with heart shaped leares and singular, siphon shaped, rich purple flowers. As a covering for verandas it is very effective. Hardy perennial: thirty feet high.
Aristolochia sipho.

## IRMERIA-(Thrift, or Sea Pink).

These handsome plants are well adapted for ornamenting rock work, and edging walks. May also be grown in pots Hardy perennial; six inches high.
Armeria maritima. pink.

## ASPERULA.

A profuse blooming, dwarf, hardy annual, with sweet scented, delicate lavender blue flowers; beautiful in bouquets; height one foot.


## Asperula.

Asperula azurea setosa. $\qquad$

## ASTER.

These old, reliable and universal favorites have been so wonderfully improved of late years that now they may be had in almost endless variety of size, form and color. They are all hardy annuals and are all equally easily grown. The following list is arranged according to height.
Aster, Shakespeare, mixed, plants form compact bushes, ten to twelve inches in diameter, and six inches high. Extremely handsome; very double. All colors mixed, dwarf
" new dwarf Bouquet (Boltz), very constant in height and habit of plant, which is a valuable quality. Splendid mixed; height eight inches...... 10

* dwarf Chrysanthemum, flowers large, three to four inches in diameter, a single plant being a bouquet of itself; later than the above; height ten inches. All colors mixed. $\qquad$


Aster, Chrysanthemum Flowered.
Aster, dwarf Victoria, like tall Victoria in habit. Of great utility for edgings and pot culture. Height twelve inches. All colors mixed ....................... 10 twelve inches. All colors mixed .......................... a single plant often forming a complete pyramidal shaped bouquet, carrying from fifteen to twenty flowers, and completely hiding the foliage; height - one foot. A fine range of colors mixed
" Triumph, deep scarlet, one of the finest dwarf asters yet produced; flowers very large and of faultless pæony form; height one foot................ 15
" Diamond, a variety of the highest merit, having large double flowers of rich and varied colors. One of the best for cut flowers; eighteen inches high. All colors mixed.
" Rose, large flowered, flowers double, oval, resembling a double rose in shape; colors very brilliant. An extra good sort. All colors mixed: height eighteen inches.
Imbricated Pompon, flowers of perfect form and so double as to appear spherical; height eighteen inches. All colors mixed.


Aster, Imbricated Pompon.
Aster, German, Quilled, the petals have the appearance of quills or tubes; flowers large, freely produced and of brilliant colors; height eighteen inches. Mixed all colors.

5
" Lilliput, characterized by the diminutive size and abundance of the flowers; fine for cut flowers; height one and one-half feet. All colors mixed.... 10 " Truffaut's Perfection, pæony flowered; seed saved from the most perfect of this magnificent strain; height eighteen inches.
$\begin{array}{ccc}\text { "، Truffaut's Perfection, snow white...................... } 15 \\ \text { "، } & \text { light blue..................... } 15 \\ \text { ". } & \text { " } & \text { " } \\ \text { crimson }\end{array}$ colors. ....................................................... 15


## Aster, Peony flowered.

Aster, Prony Flowered, flowers of immense size, four to five inches in diameter; height two feet. Mixed, many colors.
" Victoria, a splendid race of asters globular, very double; height two feet.
". Victoria, white, turning to azure blue......... ....... 15

". $\quad$ mixed, including all colors ........................ 10


Aster, Cocardeau, or Crown, a most excellent variety; flowers large, white centered surrounded with many bright colors; height two feet. Mixed all colors.

Aster, Reid's Improved Quilled, remarkable for its tubular petals, resembling quills; height about two feet. All colors mixed.


Aster, Goliath, Mont Rose, splendid variety; flowers a charming peach color; plants large, branching. 20
" Goliath, Mont Blanc, similar to Mont Rose, except with white flowers.

20
"G Goliath, crimson, valuable for florists...............
Giant Emperor, snow white; flowers very double,
" Washington, flowers the largest of any of the asters, often four to six inches in diameter; plants two feet high; a valuable acquisition. Mixed
colors............................................................ 20

## AURICULA-(Primula).

Called also Primula Auricula and French Cowslip. This old and well known favorite does not bear well the extremes of heat and cold. Culture same as for Primrose. Tender perennial; height six inches.
Auricula, Alpine, the most hardy variety.
................... 15
" finest prize, mixture of all the choicest varieties. .20

## AZALEA.

Spring flowering shrubs, universally admired for their beautiful flowers, which are invariably produced in great profusion. The flowers are of all conceivable colors, and for brilliancy are unsurpassed.
Azalea indica, finest mixed. Green-house evergreen shrubs; flowers very beautiful

## BACHELOR'S BUTTON.

Under cultivation this is really a handsome flower, sporting into varieties of white, purple, pink, parti-colored, etc. Hardy annual; two to three feet high.


Bachelor's Button, Centaurea cyanus, mixed.......... 5
BALLOON VINE-(Cardiospermum).
Remarkable for its inflated membranous capsules: sometimes called Love-in-a-Puff. A rapid and graceful climber. Tender annual; six feet high.
Cardiospermum halicacabum, white; from India..... 10

## BALSAM-(Impatiens).

Also called Lady Slipper and Touch-Me-Not. The Balsam has been so greatly improved by cultivation of late years that with proper treatment and good seed a single flower is the exception now rather than the rule. Hardy annual; one to two feet high.


Balsam, double Solferino, satiny white, streaked and spotted with crimson and lilac. Very choice
" mixed, double dwarf, grows only about one foot high
" double, tall, grows about two feet high.....................

## BAPTISIA-(False Indigo).

A very ornamental border plant, producing bright blue, pea shaped flowers, borne on spikes six inches long. Hardy herbaceous perennial; three feet high.
Baptisia Australis, blue. $\qquad$ ....

## BARTONIA.

A very pretty flowering plant of the Gentian family, producing a profusion of fine, bright metallic yellow blossoms about two inches across. Tender annual; one foot high.


Bartonia aurea, golden yellow

## BEGONIA.

The tuberous rooted Begonia is equally charming as a house plant or for bedding out doors in a cool, partially shaded place. They bloom profusely in three or four months from sowing the seed, and continue until cut off by frost. Store roots in a dry cellar through the winter like Dahlias. Tender perennial.
Begonia robusta perfecta, remarkable for its robust and compact habit, dark green foliage, and large double fowers of brilliant cinnabar scarlet
". Rex, mixed (ornamental leaved varieties) saved from the best hybrids; very chomee .


## Begonia, Double.

Begonia, Tuberous Rooted varieties, mixed. These mixtures are the results of the careful fecundation of all the most beautiful varieties. They include the handsomest shades of all colors, and the individual florets average from two to three inches in diameter.
Single mixed................................. . . . . . . . . . . . . 25
Double "
50


Begonia, Single.
BELVIDERE-(Summer Cypress).
An ornamental, cypress like plant with inconspicuous, green flowers, nearly hidden by the foliage. It is well adapted for growing in cemeteries. Hardy annual.
Belvidere (Chenopodium scoparium). $\qquad$
BIGNONIA-(Trumpet Vine).
Well known, perhaps the most showy, and is one of the best hardy, deciduous climbers for covering verandas, arbors, trunks of trees, old walls, etc. Flowers brilliant scarlet, trumpet shaped; perennial.
Tignonia radicans.

## BOCCONIA.

Stately ornamental foliaged plants, well adapted for lawns, either singly or in groups. Hardy, herbaceous, perennial.
Bocconia Japonica, four to six feet high; splendid foliage; flowers in clusters and pure white..

10
BRACHYCOME-(Swan River Daisy).
A dwarf growing plant flowering the greater part of the season. Very effective in edgings, beds, or rustic baskets. Half hardy annual; one-half foot high.
Brachycome, mixed blue and white.
BRIZA-(Ornamental Grass).
Very useful ornamental grass, much sought for in forming winter bouquets and wreaths; one foot high.


Briza maxima, large; attractive...... ..................... 5
gracilis, slender; dwarf.

## BROWALLIA.

These handsome, profuse bloomers are now used very freely both for indoor decorations and for planting outdoors, on account of the ease with which they may be grown and their usefulness for cut flowers. Half hardy annual; height eighteen inches.
Browallia roezli, makes a compact plant, and produces pure white and blue flowers of twice the size of the oider sorts.
" elata, fine mixed

## BRYONOPSIS.

An ornamental climber of the gourd family, bearing green fruits, which change in color as the season advances, to bright scarlet striped with white. Very handsome and of rapid growth. Tender annual; height ten feet.
Bryonopsis laciniosa erythrocarpa, ten feet
CACALIA.-(See Tassel Flower.)

## CALANDRINIA.

Fine dwarf plants for growing in masses. They produce an abundance of blossoms, and are well suited for edgings, rockeries and clumps. Tender annual; one-half to one foot high.
Calandrinia grandiflora, rosy lilac
" umbellata, crimson

## CALAMPELIS.

A beautiful, tender climber from Chili, with delicate foliage, and bright orange blossoms in racemes, freely produced late in the season. Tender perennial; fifteen feet high.
Calampelis (Eccremocarpus) scaber.

## CALCEOLARIA.

A favorite and universally admired genus, remarkable for their large, beautifully spotted blossoms, which are very showy, and from which an almost countless number of hybrids have been raised. They are grown in pots in the conservatory, green-house and garden. Herbaceous or shrubby evergreen perennials.
Calceolaria hybrida grandiflora, flowers of immense size; seed saved from finest specimens. Very choice. ... ............................................. 25
" hybrida tigrina, flowers of the largest dimensions; beautifully maculated or spotted. Seed saved from choicest collection.
، rugosa, bedding variety; shrubby; grown in and out of doors. Mixed seed, saved from the finest shrubby sorts only..

Calceolaria hybrida pumila compacta tigrina,
dwarf variety, ten inches high. Flowers of fine form and beriutiful color; desirable for contrast with taller sorts.


Calceolaria.
Calceolaria, finest hybrids mixed, seed sared only from the most perfect flowers, embracing many of recent introduction; all desirable.

CALENDLLA.-(See Marigold.)

## CALIFORNIA POPPY.-(See Eschscholtzia.)

## CALLA-(Ethopian Lily).

An old and very desirable plant, either as an aquatic or as an ornament for the drawing room and conservatory. Will flower in one year from planting of the seed. Half-hardy perennial.
Calla Ethiopica

## CALLIOPSIS, or COREOPSIS.

A very showy border plant, producing flowers in nearly every shade of yellow, orange, crimson, red and brown. Hardy annual; two feet high.
Calliopsis, fine mixed. $\qquad$ ....

CALLIRHOE-(Poppy Mallow).
Extremely handsome border plants, bearing large, rich, violet-purple flowers in great profusion throughout the season. Hardy annual; one to two feet high.


Calliahoe I v voluenata
Callirhoe involuerata, trailing; purplish-crimson. ...... 5 "f pedata, purple, white eye. ................................. nana, dwarf; one foot. ............................... 5

## CAMELLIA.

All species of Camellias are universally admired on account of their beautiful, rose like flowers, and elegant dark green. shining, laurel like leaves. They are hardy green-house shrubs of easy culture, requiring only to be protected from frost.
Camellia Japonica, fine double mixed, seed sared from the finest double varieties, and will undoubtedly produce some very valuable kinds of various culurs.

## CANARY BIRD FLOWER.

## (Tropceolum peregrinum.)

A beautiful climber. the charming little canary colored blossoms bearing a fancied resemblance to a bird with its wings half expanded. The plant has a fine, luxuriant, rambling character, and if the seeds are planted by the side of an arbor or trellis, to run upon, it will run twenty feet high, and blossom from July till frost comes. Tender annual.
Canary Bird Flower
CANDITEFT-(Iberis).
Universally known and cultivated, and considered indispensable for cutting. All the varieties look best in beds or masses. Hardy annual; one foot high.


Candytuft, purple.
"6 white....................................................... 5
" Rocket (Empress), white.
" fragrant, white
" carmine, of dwarf, compact habit
"f carmine, of dwarf, compact habit........................... 10
" dwarf mixed hybrid, grows only from four to six
., perennial (Sempervirens).................................................... 10


## CANNA.

Stately and highly ornamental plant, desirable not only for the beauty of its spikes of flowers, but for its elegant foliage. The leaves are rich deep green, three feet long and six inches wide, very handsome as they unfold themselves. Tender aunual in open ground; four to six feet high.
Canna Indica (Indian Shot), scarlet blossoms. . .10
"6 nigricans, orange blossoms. ............................... 15
" Warszewiczii, bright red flowers; striped foliage; very beautiful.....
. 10

## CANTERBURY BELL-(Campanula Medium).

Handsome, hardy biennial, of stately growth, rich color, and profuse bloom. Succeeds best in light, rich soil; and should be transplanted two feet apart. Their large, bell shaped flowers are freely produced throughout the summer, and are strikingly effective.
Canterbury B
" ${ }_{\text {" }}$, double white.
10
" mixed, blue and white.
single mixed..
calycanthema, mixed, flowers large,
of fine form, white, lilac, rose and purple.
10
CARIIOSPERMUM.-(See Balloon Vine.)

## CARNATION and PICOTEE-(Dianthus Caryo-

 phyllus).No flower can surpass in delicacy of marking, form, or delicious fragrance, the rich hued Carnation. It has always been one of the most esteemed of the florist's collection, and there is no flower more desirable for the garden. Half-hardy perennial; one and a-half feet high.
Carnation, fine double selves, one color.
" fine double striped.
" Double dwarf (Vienna), early flowered.
" choicest, white ground.
"double Grenadin, a splendid variety for florists; very early, charming double scarlet flowers. Exceedingly valuable for making bouquets, as the color is so brilliant as to render it very conspicuous 25
" extra fine mixed double Picotee..
" extra choice double mixed, seed saved from the choicest French, German, Italian and English stocks. A large proportion of this seed will produce double flowers. This variety will be appreciated by the florist.
" double mixed, good seed, producing many double flowers of all shades and colors.

## CASTOR BEAN-(Ricinus).

Tall, majestic plants for lawns, with leaves of glossy green, brown or bronzed metallic hue, and long spikes of prickly capsules of scarlet and green. An elegant plant for a lawn, and of very quick growth in rich soil. Tender annual; eight to ten feet high.


Ricinus sanguineus, splendid red fruit in clusters; blood red stalks.
" tricolor, leaves spotted.................................. 1
giganteus, leaves of large size, richly veined and
marbled; ten feet high..................................... 10

Ricinus communis major (Palma Christi), the common Castor Oil Bean. mixed

## CATANANCHE.

The flowers are white with a violet centre, and blue with purple center, quite double, somewhat resembling a pink, and extremely showy. It will blossom more freely in light, well drained soil, will begin to bloom in July or August from seed sown in April. Hardy perennial; one and a-half to two feet high.
Catananche cœrulea, blue, purple centre.
5
" bicolor, white, violet centre.
5

## CATCHELY-(Silene).

An easy growing, free flowering plant, producing dense umbels of white, red and rose pink-like blossoms. The plant is covered with a glutinous moisture, from which flies cannot disengage themselves, hence the name Catchfly. After having been once grown, the seed will sow itself in the ground. Hardy annual; one foot high.
Silene armeria alba, white.
"6 "، rubra, red..
mixed.

## CEDRONELLA.

A beautiful, hardy evergreen, perennial plant, having fragrant leaves, and producing long spikes of salvia shaped, crimson blossoms, which remain a long time.
Cedronella cana, three feet high.
10

## CELASTRUS-(Climbing Bitter-Sweet).

Hardy, deciduous climber, producing yellow blossoms early in the season; later, ripened fruit, which is very ornamental and remains on the vines nearly all winter. Grows about twenty feet high.
Celastrus scan-
dens ....... 1

## CELOSIA.

Magnificent plants for green-house or conservatory decoration, producing elegant, plume shaped spikes of flowers; look well in vases out of doors in summer. Half-hardy annuals; one to three feet high.
Celosia pyramidalis, crimson feathered, crimson
spikes, beautiful.

" pyramidalis plumosa,
mixed, beautiful long
plumes; pyramidal in form, of red, yellow, violet, etc.; very striking.
" cristata (see Cockscomb).

## CENTAUREA-(Dusty Miller).

An exceedingly interesting genus of plants, embracing annuals, biennials and perennials. Some of the varieties are magnificent foliage plants, indispensable for borders and cdges of beds; while others are noted for their beautiful flowers.
Centaurea gymnocarpa, silvery gray foliage; drooping habit, very graceful. .

15
" candidissima, fine, ornamental plant of great beauty. Silvery white, deeply cut foliage. Halfhardy perennial.
" Clementei, foliage white, deeply cut, and altogether very beautiful. Half-hardy perennial
" Americana, hardy annual from Arkansas, two feet in height, and of strong, robust growth; flowers purplish-red, very pretty.
" cyanus (see Bachelor's Button).
" moschata atropurpurea (see Sweet Sultan).
CHAMAROPS.-(See Palm.)
CHEIRANTHUS.-(See Wall Flower.)
CHRYSANTHEMUM.
Chrysanthemums have deservedly become very popular during the last few years. They are showy and effective in the garden, and very desirable for cut flowers. Our list affords a fine range for selection.

The following varieties are hardy annuals one and ahalf to two feet high.

Chrysanthemum carinatum Burridgeanum, crimson, white centre: single.
" carinatum "E.clipen," pure colden wellow with bright purplish-scarlet ring or centie on with a florets, the disk being dark brown; very striking... 15 " coronarium, double white
" charming double flowers of a delicate lemon or sulphur shade, very desirable for bouquets or gen eral decorative purposes

* coronarium, double mixed


Chrysanthemuis Frutescens.
Chrysanthemum frutescens, Marguerite, or Paris Daisy.-This variety, under the name of Marguerite, has obtained great popularity among florists. The pretty. star shaped, white flowers are freely produced, and the plant will grow under almost any circumstances

10
The following varietias are for pot culture, for blooming in the house in vinter, and for florists for cutting for ornequets.
Chrysanthemum Indicum fl. pl., half-hardy perennial, very double; mixed colors

* Japonicum fl. pl., Japanese variety Flowers of very peculiar form, and much beauty, combining numerous shades of color. Very interesting. Halfhardy perennial.
* superb mixed double, seed from the finest Chinese and Japanese varieties extant, which we offer in mixture. The devolepment in these classes has been marvelous. Those who are on the lookout for new varieties should not fail to secure some of this strain.



## CINERARIA

Green-house permmials. which can bee plantml on in sante mer. They thriwe be-t in a mixture of loam ablat poat, on 1 young cuttings rout freely muln ylans. fint to thom fort high.


Cineraria Maritima Candidissima.
Cineraria maritima candidissima, extremely handsome, silvery white foliage: very ornamental as a decorative pot plant, or for bedding purposes..
" hybrida, very dwarf, dwarf variety, growing oniy eight inches high. Blooms profusely in many colors; very desirable $\qquad$
hybrida flore pleno, the flowers are perfectly and evenly double, being enticely made of ligulate florets, as in double Jacobæa. The colors run through all the shades peculiar to cinerarias.


Cineraria Hybrioa.
Cineraria hybrida, choicest mixed, from the best named varieties. Flowers from this seed have obtained many first-class prizes. Extra chwice..... 25

CLAKKIA.
The flowers are very pretty, and of many colors, double and single. It is better to sow the seed in September, and the plants will be large enough by spring to make good bloom. Hardy annual; one and a-half feet high.
Clarkia pulchella flore pleno, double, beautiful, rich magenta color.
"pulchella intecripetala, rosy crimson.
" elegans flore pleno, douhle rose...
mixed, best and finest varieties.

## CLEMATIS

Well known and universally admired climbers, some of the varieties being remarkable for the beanty and framrance of their blossoms. Fine for covering arbors, verandas, etc., as
they cling readily to almost any object. Most of the kinds are hardy, herbaceous perennials, but some little protection in northern latitudes, through winter, is advised.
Clematis Virginiana (Virgin's Bower), a rapid climber with white blossoms, growing twenty feet in a single season.

10
" Verticellata, produces beautiful blue flowers from June to September, on long peduncles from the axis of the leaves; rather bell-shaped and nodding. Grows eight to ten feet in a season................. 10 Flammula, a luxuriant climber with clusters of
small, white, fragrant flowers in August and September. Sometimes called Sweet Virgin's Bower.. 10
"6 mixed, a superb mixture including the most desirable kinds.

## CLIANTHUS.

Curious green-house shrubs, with singularly beautiful foliage, and magnificent clusters of long, drooping flowers, somewhat resembling a parrot's beak. About three feet high, and succeeds best in loam, peat and sand mixed; does well planted in a border of the conservatory, or will flourish against a south wall, if protected from cold and frost. Does not bear transplanting, and should be kept rather dry. Among the most magnificent blooming plants in cultivation.
Clianthus Dampieri, bright scarlet blossoms. $\qquad$ .20

## COBAEA.

A fine, rapid growing climber, with handsome foliage and large, bell shaped flowers, green at first, but rapidly changing to a beautiful deep violet-blue. A well established plant


Cobea Scandens.
will run fifty feet in a season, covering a large veranda with handsome foliage and beautiful flowers. Tender perennial. Cobrea scandens $\qquad$ ....

## COCKSCOMB-(Celosia).

Highly ornamental plants, producing crested heads of flowers, somewhat resembling a cock's comb. There are

many shapes and colors, but of all colors the scarlet and crimson are the most brilliant and rich. Tender annual; one to three feet high.
Celosia cristata, dwarf crimson, brilliant .10

"Glasgow Prize, a very fine semi-dwarf variety with large, brilliant crimson comb, and handsome dark foliage
" new Japan (Celosia Japonica), the comb is finely cut, delicate as lace, and wonderfully brilliant...... 10
6 variegated, variegated in branch, leaf and comb; very handsome....

## COLEUS.

Probably there is no other kind of ornamental foliage plant so well known and universally admired as the Coleus. The leaves are of all shapes, shades and colors, and nearly all have a rich, velvety appearance of extraordinary beauty. No yard should be without these decorative plants. Tender perennial.
Coleus, mixed, twenty-five best named'sorts. .......... .. 25 new hybrids mixed. 25

## COLUMBINE-(Aquilegia).

The old single varieties of Columbine have been known and admired for centuries under the name of Honeysuckle. The new double sorts are very beautiful, and embrace a great variety of colors and forms. Hardy perennial; two feet high.


Aquilegia alba plena, double white........................... 10 corulea hybrida, double, a vigorous growing, very handsome variety with blue and white flowers...... 10
6 Californica hybrida, one of the handsomest of all the columbines, having orange, red and yellow flowers . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 10
6 vervaeneana fol. variegatis, one of the few striking variegated plants, reproduced with certainty from seed. Double rose colored blossoms; exceedingly beautiful

15
6 mixed double, best and finest colors.

## COMMELINA-(Day Flower).

The splendid white and blue flowers of this plant cannot be excelled, and its profusion of blossoms renders it worthy of cultivation. Tender perennial; one and a-half to two and ahalf feet high.
Commelina colestis, sky blue. 5


## CONVOLVULUS.

A magnificent class of trailing annuals, some of which produce flowers of wondrous beauty. Useful for verandas, lattice, etc., and grows freely in any good garden soil.
Convolvulus aureus superbus, very large, golden yellow flowers; grows six feet high

Convolvulus mauritanicus, trailing plant, about one foot high, and produces an abundance of rich, satiny, lavender blossoms. Especially adapted to rock work or baskets: perennial in greenhouse.... 10 " Major (See Morning Glory).

CONVOLVULUS MINOR-(Dwarf Morning Glory).
Dwarf plants, of trailing, branching habit, each plant occupying a space of two feet. At mid-day they are completely covered with a mass of most brilliant, many colored blossoms, which remain open till evening, in dry weather. Half-hardy annual; one foot high.
Convolvulus Minor tricolor, bright blue, shaded to pure white, next to the golden centre.................. 5 " Minor alba, pure white.
" ${ }^{6}$ \% striata, finely shaped....................................... 5
" " mixed....................................................... 5
" " unicaulis, a single, upright stem, without a branch and with a compact head of flower buds in great profusion, which expand into blossoms of immense size, of very rich purplish-blue color, and continues in bloom the whole season.................... 10

COIX-(See Job's Tears).

## COSMOS.

A very effective autumn flowering plant. Quite hardy and rapid growing, forming bushes often four feet high and covered with large, single, daisy like flowers, two to three inches round, and of a great variety of bright and attractive colors. Cosmos bipinnata hybrida.
. 25

## CRUCLANELLA.

A pretty little plant, growing one foot high, and producing clusters of star shaped, pink flowers. Fine for rock work, vases, etc. Hardy perennial.
Crucianella stylosa.

## CUCURBITA-(See Gourds).

## CLPHEA.

A favorite bedding plant with green-house men; familiarly known as Cigar Plant, on account of its fancied resemblance to a lighted cigar. Tender perennial; one and a-half feet high.
Cuphea platycentra (Cigar or Firecracker Plant), scarlet, white and purple..
" silenoides, dark crimson brown 10
"6 Zimapani, violet red 10
$\qquad$ 10

## CYCLAMEN.

Well known and universally admired bulbous rooted plants, producing exceedingly handsome red and white flowers. Tender perennial; one foot high.


Cyclamen Persicum, mixed, variety of great beauty
"Persicum giganteum, mixed, characterized by beautiful foliage and profuse bloom: each flower is from two to two and a-half inches long. Very
choice...

CYPRESS VINE-(Ipomæa Quamoclit).
A most beautiful climber, with delicate, dark green. feathery foliage, and an abundance of bright, star shaped. rose, scarlet and white blossoms, which in the bright sunshine present a mass of beauty. Planted by the side of veranda, tree or stakes, and trained properly, there is nothing prettier. Tender annual; fifteen feet high.


Cypress Vine, scarlet


## DAHLIA.

This magnificent race of plants is too well known to need description, though it is not generally known that they may be had in the greatest variety and beauty from seed, both of the single and double sorts. If planted early and pushed they can be made to flower the first season. Tender herbaceous perennials.


Dahlia, finest double, mixed, seed saved from choicest double flowers.
"f finest single, mixed, brilliant flowers running through a wide range of striking colors, easily raised from seed and very desirable.

## DAISX-(Bellis).

Admirable plants for cultivating in pots or in beds or borders which are partially shaded. Grown from seed, fully
four-fifths of the plants will produce flowers as large and perfect as any of the named sorts. Tender perennial; height six inches.
Daisy, double white introduced red, a novelty of high merit, recently Comes true from seed. Flowers very large and double.
*6 double mixed, choice

## DATURA.

Large, branching plants, producing handsome, double and single, trumpet shaped blossoms, yellow, white, lilac and blue, and of exquisite fragrance. Some of the flowers are equal in beauty to our choicest lilies. Tender annuals; three feet high.


Datura Wrighti, pure white at the centre, passing into lilac and blue at the border; very fragrant.
" chlorantha f. pl., magnificent, large, double yellow blossoms, richly scented.
" fastuosa alba fl. pl., flowers double, pure white..... 5

* mixed, seeds of the above varieties mixed....... .. 5

DELPHINIUM-(See Larkspur).
DEW PLANT-(See Mesembryanthemum).
DIANTHUS-(See Pink).
DIANTHUS BARBATUS-(See Sweet William).
DIANTHUS CARYOPHYLLUS-(See Carnation).
DIGITALIS-(See Foxglove).
DOLICHOS-(See Hyacinth Bean).
ELICHRYSUM - (See Helichrysum) .
ERAGROSTIS-(See Love Grass).

## ERIANTHUS RAVENNAE.

A very desirable ornamental grass, equal to Pampas Grass in appearance and habit of growth, and superior to it for


Eschscholtzia Californica.
general culture, as it is entirely hardy and blooms more abundantly; useful in sub-tropical gardening. _ Perennial; beight six feet.
Erianthus Ravennæ $\qquad$ ....

## ESCHSCHOLTZIA-(California Poppy).

A genus of the poppy family and fully as valuable as the common poppy for garden ornamentation, and as easily grown. Nothing is handsomer or richer in color than a bed of these in full bloom. Hardy annuals; height one foot.
Eschscholtzia mandarin. The outer side of the petals is brilliant scarlet, the inner side, rich orange......... 15
. Californica, bright yellow
" crocea alba fl. pl., creamy white, double....... ..... 5
" mixed...................................................................... 5

## EULALIA JAPONICA.

A most magnificent ornamental grass from Japan, growing five to six feet high, and exceedingly graceful. A single plant often makes thirty to forty elegant, recurved flower spikes of light violet color, resembling ostrich plumes Beautiful for vases in the winter.
Eulalia Japonica, light violet, beautiful
.10

## EUPHORBIA.

Euphorbia variegata, hardy annual; foliage beautifully veined and margined with white; very showy Sometimes known as "Snow on the Mountain". .. 5


Euphorbia Variegata.

## EUTOCA

Foliage dull green, covered with hairs; blossoms intense blue striped, three-quarters of an inch across, produced in terminal racemes. Excellent for cutting. A branch placed in water will bloom many days. Hardy annual; one foot high.


## FEATHER GRASS-(Stipa)

Hardy, perennial, ornamental grass of much beauty, used in the formation of winter bouquets.
Stipa pennata (Feather Grass), delicate and pretty.... 10

## FERNS.

Flowerless plants, too well known to need description Many of the varieties are exquisitely beautiful. Many of the most beautiful sorts are propagated from seed only. Their exceeding grace and beauty will well repay all care bestowed upon them.


Ferns, fine mixed, an almost endless variety 25 Anty finest species mixed, very beautifui.......... 25 NA Our packet of fifty species mixed contains all the newest and most desirable kinds of ferns.

FEVERFEW.-(See Matricaria and Pyrethrum.)

## FORGET-ME-NOT-(Myosotis).

Myosotis alpestris, plant of compact, bushy habit, growing six to eight inches high; flowers large, blue; hardy perennial

10
" dissitiflora, very deep blue; early blooming; a welcome addition to this class of spring bedding plants, so much in requisition. . . . . . . . . . . . ............ 15

## FOUR O'CLOCK-(Marvel of Peru).

The plants are large and require four feet of space; make a pretty hedge. The flowers are funnel shaped, white, red and striped, very fragrant, and open about four o'clock in the afternoon, remain open all night, and generally perish before noon the next day. The French call it Belle de Nuit, "Beauty of Night." Will grow in any common garden soil, from seed sown in open ground. Hardy annual; two feet high.
Four O'Clock, gold striped
. . .

$$
\text { " } \quad \text { " } \quad \text { red................... }
$$

white..
yellow.
mixed.
$\qquad$ ...

## FOXGLOVE-(Digitalis).

Ornamental plants of much beauty, producing dense spikes of flowers on stems three to five feet high. The blossoms are thimble shaped, purple, white and spotted, and very striking. Hardy biennial; three feet high.


Foxglove.
Digitalis, Ivery's new spotted, great improvment on the old sort; an endless variety of colors; robust, strong and hardy
" splendid mixed.

## FRAGARIA-(Chinese Strawberry).

Pretty, hardy, herbaceous creeper from India, with beautiful yellow blossoms, and bright red fruit, like small strawberries. Elegant for rock work or hanging baskets. Perfectly hardy.
Fragaria Indica $\qquad$ ....

## FRENCH HONEYSCCKLE-(Hedysarum).

Very handsome, free flowering plants, producing racemes of beautiful pea like flowers; particularly adapted for borders or rockwork. Hardy perennial; four feet high.
Hedysarum coronarium, brilliant scarlet.
f. alba, true; white.

## FCCHSIA.

The varieties of fuchsias are now numbered by hundreds, and some are exceedingly beautiful. They are as easily grown from seed as cuttings, and from seed many improved varieties are obtained. Tender perennial.
Fuchsia, double, finest mixed, from the finest specimens
double, white corollas, very beautiful.


## GAILLARDIA.

Showy and universally admired plants, flowering the first year, and among the gayest ornaments of summer flowering beds.
Gaillardia picta, one foot high; flowers crimson and yellow. Half hardy annual.
" picta Lorenziana, one of the most striking and valuable novelties introduced of late years. For general decorative purposes, as well as for bouquets. it is invaluable, its gay colored flowers being abundantly produced from July until frost sets in. Half hardy annual; one foot high; sulphur, orange. claret and amaranth, mixed.
66 grandiflora, the largest flowers of the species; blossoms scarlet and orange. Hardy perennial.

## GERANICM-(Pelargonium).

Probably the geranium is better known and more universally admired than any other plant grown. The constant succession and durability of bloom till frost comes, the brilliancy of the scarlet and other colors, and the exquisite markings of the leaves of some of the varieties, render them

very desirable for pot culture and bedding. No garden seems complete without a bed of them, and in every collection of conservatory or parlor plants we are sure to find the geranium. Propagation by seed is the only way to obtain new varieties. One-half hardy perennial.
Geranium (Pelargonium) diadematum, splendid variety
(Pelargonium) Odier, five petals blotched ....... 50
(Pelargonium
" double, finest double varieties mixed........................... 50
" Zonale, scarlet, mixed sorts.
" 6 white leaved varieties, mixed. ............... 25
6 apple scented, very fragrant...................................... 25

## GILIA.

Hardy annual, one to two feet high; grows in almost any situation, in beds or in rockery.


Gilia Capitata
Gilia capitata, dense, globular heads of clustered blossoms of azure blue. Two feet high
" capitata tricolor, flowers blue, with yellow and purple centre. Sow in masses. One foot high......... 5

## GLADIOLUS.

Magnificent plants with sword like leaves and long spikes of flowers of every conceivable color and shade. The varieties are now numbered almost by thousands, each year bringing forth new and choice selections which have been produced from seed, which is the only method of obtaining new varieties. Half hardy perennial.
Gladiolus, finest mixed, from fifty choice named varieties
For Bulbs, see Spring Bulbs in this Catalogue

## GLAUCLUM-(Horned Poppy).

One of the most ornamental of silver leaved plants. The leaves are recurved, elegantly indented and silvery. Flowers bell shaped, orange. Hardy perennial; one and one-half feet high.
Glaucium corniculatum

## GLOBE AMARANTH-(Gomphrena).

A desirable everlasting, valued for its handsome, globular heads of flowers, which, if cut, when well matured, will retain their beauty for years. Tender annual; two feet high. Gomphrena globosa, purple


## GLOXINIA.

Green-house perennial plants, producing rich and beautifully colored flowers. They deserve extensive cultivation Gloxinia hybrida, mixed, all choice sorts. .25

## GNAPHALIUM-(Everlasting).

An interesting class of immortelles, with rather homely foliage, but beautiful clusters of bright golden blossoms, which, if plucked when on the point of opening, and dried in the shade, will retain their beauty for years. Good for forming winter bouquets in conjunction with other everlastings and grasses.
Gnaphalium fotidum, tender annual, one and a-half feet high.
" leontopodium (Edelweiss). This is the true Edelweiss found on the Alps, and so highly esteemed by travelers in Switzerland. Flowers star shaped, pure white, and downy in texture. Perennial.


## GODETIA.

Beautiful garden plants, of easy cultivation in any good garden soil, and remarkable for the delicacy of their very fine, large blossoms. Hardy annual; one to one and a-half feet high.
Godetía rubicunda splendens, a very showy variety. Rosy lilac flowers, with purple stain in the centre.. 5 6 rosa alba (Tom Thumb), delicately blotched blossoms, white at the outer portion and rose at the base of the petals. $\qquad$
" Lady Albemarle, intense carmine crimson; compact habit; very beautiful.................................. 10
" Whitneyi, Duchess of Albany, a magnificent sort, producing a profusion of large, rich, satiny-white flowers, measuring about four inches across........ . 10


Godetia Rubicunda Splendens.

GOURDS-(Cucurbita).
A tribe of climbers with curiously shaped fruit, in various colors. Being of rapid growth, they are fine to cover old fences, trellises, stumps, etc. The foliage is quite ornamental. Tender annual climber; ten to twenty feet high.
Gourd, orange, the well known Mock Orange.

* Japanese Nest Egc, white; fac-simile of an egr. do not crack and are not injured by heat or cold.
not crack and are not
Very ornamental climbers


Gourd, Pear Shaped.
Gourd, pear shaped, yellow and green, striped with cream color.
pear shaped, ringed (Pyriformis annulata) exceedingly beautiful fruit with rings running around it: green ends.
" bottle, handsome and useful
6 Corsican, elegant fruit and rapid climber...................... 10 " siphon, or dipper, long, slim handles, useful for dippers..
.10
6. powder horn, in the form of a powder horn.......... 10
" Hercules' Club, the longest of all the varieties mixed, ornamental. 10

## GRAMMANTHES.

A charming little succulent plant, producing an abundance of bright scarlet and orange-yellow blossoms in the shape of a star. It is especially adapted for rock work, hanging baskets, edgings, etc. Tender annual; six inches high.


Grammanthes gentianoides, rich orange-scarlet......... 10 GYNERICM.-(See Pampas Grass.)

## GYPSOPHILA.

Delicate free flowering little plants, covered with a profusion of little star shaped, white blossoms. Well adapted for hanging baskets and edgings, and valuable for making bouquets. Make handsome specimens dried.
Gypsophila elegans, white and pink flowers; hardy
annual; one foot high.
6 muralis, pink flowers; hardy annuai; six inches....... 10
HEDYSARCM-(See FrenchtHoneysuckle).
HELIANTHCS-(See Sun Flower).

## HELICHRYSLM.

Large, full, double flowers of various colors, from bright rellow to scarlet shaded and tipped. Peculiarly desirable as dried specimens; exceedingly handsome bouquets may be formed of them for winter, if blossoms be gathered when on the point of expanding. Hardy annual; six inches to two feet high.

Helichrysum bracteatum (Golden Eternal Flower, bright yellow

* nanum atrosanguineum f. pl., deep crimson.
" compositum album fl. pl., flowers white.
" monstrosum fl. pl., mixed, eight varieties of largest double flowers, mixed. .


Helichrysum.
Helichrysum nanum fl. pl., mixed, five dwarf growing. double flowering varieties, mixed.
minimum fl. pl., mixed, four varieties of beautiful little miniature double flowers, fine

## HELIOTROPE.

Highly valued for the fragrance of their flowers and duration of bloom. Half-hardy perennial; one foot high.
Heliotropium, Anna Turrell, violet-blue.
" Roi des Noirs, black, splendid
" Triumphe de Liege, deep blue; fine .10

HELIPTERCM-(Everlasting).
A very desirable and distinct dwarf everlasting, with large globular clusters of bright yellow and pure white. star like flowers. Is excellent for forming winter bouquets. for which purpose the flowers should be gathered when on the point of opening, and dried in the shade: they will open while drying, and will retain their brilliancy_for years. Hardy annual; one foot high.
Helipterum Sandfordii, golden.

- anthemoides, pure white
" mixed.


## HESPERIS -(See Rocket).

## HIBI心CES.

A branching plant of the easiest culture, with rather pretty foliage, and large, exceedingly showy blossoms.
Hibiscus Africanus, cream colored blossoms. purple in the center. Hardy annual; two feet high
" coccineus, large, brilliant scarlet blossoms; very showy; green-house perennial; three feet high ..... 10
" mutabilis albus fl. plu, double white. Very choice green-house perennial

## HOLLIHOCK.

The hollyhock, in its present state of perfection, is very unlike its parent of olden time; it now ranks with the dablia, aster, camellia, etc. For a background to a Hower garden, perhaps no plant is so useful. The flowers are as double as a rose, of many shades of color, from deep yellow, red, purple, to pure white. Hardy perennial: five feet high. Hollyhock, double, pure white.



## Hollyhock

## HONESTY, or SATIN FLOWER-(Lunaria).

Early, free flowering plants, interesting for the silver like tissue of the seed pods in their matured state. The flower is purple; not very conspicuous. The seed pods are fine for skeletonizing and working in with other everlasting flowers for winter bouquets. Hardy biennial; two feet high.
Honesty (Lunaria biennis). . $\qquad$
$\qquad$
$\qquad$
HORDEUM-(Ornamental Grass).
A beautiful ornamental grass for forming winter bouquets. It somewhat resembles our domestic barley, having heavy, bearded heads. Hardy annual.


Hordeum jubatum, two feet high.

## HUMEA.

A remarkable, handsome plant for decorative purposes. Leaves very fragrant when slightly rubbed. Half-hardy biennial; six feet high.
Humea elegans, red, from New South Wales $\qquad$ .10

## HYACINTH BEAN-(Dolichos).

Splendid climber, with abundant clustered spikes of purple and white flowers, which are followed by exceedingly ornamental seed pods; of rapid growth, often running twenty feet in a season. Tender annual; ten to twenty feet high.
Dolichos lablab purpurea, purple $\qquad$
" " ${ }^{\text {" }} \quad \begin{aligned} & \text { alba, white.. } \\ & \text { mixed, the above mixed .................................. } 10\end{aligned} 10$ .10
giganteus, tall growing, with large purple flowers... 10

## IBERIS.-(See Candytuft.)

ICE PLANT.-(See Mesembryanthemum.)
IMPATIENS SULTANI-(Sultan's Balsam.)
Impatiens Sultani, one of the most distinct and beautiful decorative plants for the hot-house, green-house or summer bedding. The plant is of compact growth. The flowers are gorgeously colored and are produced in great profusion throughout the season. Although a green-house plant, it does finely in open border. The flowers are a brilliant rosy-scarlet color, one to one and one-half inches in diameter


INDIAN SHOT.-(See Canna Indica.)

## IPOMEA.

Beautiful climbers, and exceedingly attractive mixed with other climbers. The flowers are of a variety of shapes and sizes, and of an endless number of colors, many being wonderously brilliant and of graceful form. They are alike good for green-house, for pots and baskets, and for trellises, stumps, arbors, etc. Tender annual; five to ten feet high.
Ipomea coccinea (Star Ipomea), fine scarlet...........
"، bona nox (Good Night), pure white.................. 5
" limbata elegantissima, large flowers, in form of a five pointed star, with intense purple centre, and pure white margin.......... .........................
" rubra coerulea, immense flowers of bright sky blue;
one of the best ................................................. 10
" fine mixed............................................................. . . 5


Ifomea Limbata.
IPOMEA QUAMOCLIT.-(See Cypress Vine.)

## IPOMOPSIS.-(See Tree Cypress.)

## JACOBAE-(Senecio).

Remarkably pretty, free growing, profuse flowering plants, almost unsurpassed for brilliancy and beauty. Grow freely from seed. The double are the only ones worth cultivating. Hardy annuals in open border, biennial in green-house. One foot high.
Jacobra dwarf, mixed, above varieties mixed

## JASMINE.

Hardy, deciduous, ornamental shrubs, growing three feet high, and producing beautiful yellow flowers.
Jasminum fruticans, yellow, very fragrant

JOB'S TEARS-(Coix).
Curious, ornamental grass with broad, corn like leaves, and seeds of a light slate color, wonderfully lustrous. Valuble for the formation of winter bouquets, in connection with


Coix Lachryma.
everlasting flowers, and strings of handsome beads are formed from the seeds. Hardy annual; three feet high. Coix lachryma (Job's Tears).. ........................... 5

JOSEPH'S COAT.-(See Amaranthus Tricolor.)

## KAULFUSSIA.

Beautiful, free blooming little plants of dwarf and compact growth, somewhat resembling the single asters. Flowers are light blue, pure white, and the most intense violet-purple

of any annual in cultivation. A good plant for mixed beds and borders. Hardy annual; six inches high.
Kaulfussia, fine mixed $\qquad$ ....

## LANTANA.

These plants are rapid growers, forming small, hardy shrubs, and producing their pink, yellow, orange and white flowers in great abundance. They have an agreeable, aromatic perfume.
Lantana, finest French hybrids mixed, all colors.... 10
LARKSPUR-(Delphinium).

The larkspur is one of the handsomest and most useful of plants, and for large gardens is invaluable. The brilliancy of some of the colors is unsurpassed.

## ANNUAL SORTS.

Delphinium ajacis (Double Dwarf Rocket Larkspur), hardy annual: ten inches high; twelve kinds mixed.

Delphinium cardiopetalum, deep blue; heart shaped. Hardy annual; one and a-half ffett high.
"Tall stock flowered (consolida fl. pl.), eight brightest and best colors micerd. Spikes of doukte flowers eighteen inches long, very beautiful; hardy annual; two feet high.


Delphinium Imperiale fi. pl., (Double Emperor Larkspur), one and a-half feet high, compact and profuse bloomer, having erect spikes of perfectly double flowers, which, in a dried state, are fine for winter bouquets. Mixed colors.
" consolida candelabrum fl. pl., a new type of annual larkspur, growing in the form of a branched candlestick; Howers double and of various colors, very showy.

10

## PERENNIAL SORTS.

Delphinium elatum (Bee Larkspur), has hairy petals in the center, and a fancied resemblance to a bee. Hardy perennial; five feet high
" grandiflorum album, large double white flowers. Hardy perennial; four feet high. fine for rockeries, flower borders, or pot culture: hardy perennial.


Delphinium Zalil, a new and handsome yellow flowered variety. A perennial, but will bloom freely the first year if started early.

## LATHYRUS LATIFOLIUS.-(See Peas.)

LATHYRUS ODORATUS.-(See Sweet Peas.)

## LIMNANTHES.

A native of California; quite hardy; of prostate habit; stems ten or twelve inches long, crowned with numerous


Limnanthes Douglasi.
fragrant flowers, each about an inch across. Hardy annual; eight inches high.
Limnanthes Douglasi, yellow and white................. 5

## LINARIA-(Kenilworth Ivy).

A pretty, trailing plant for covering rock work, and very useful for hanging baskets. Hardy perennial.
Linaria cymbalaria. $\qquad$

## LINUM.

A beautiful and effective genus of plants, of slender and delicate growth, and having a profusion of bright flowers. Linum grandiflorum rubrum (Scarlet Flax), from Algiers. Hardy annual.

## LOBELIA.

A most elegant and useful genus of plants, of easy culture, and well adapted for bedding, edging, pots or rockeries. They are employed as universally in general summer gardens as scarlet geraniums, to beds of which they form a neat and effective edging.
Lobelia erinus (Blue King), intense dark blue, with a white spot; dark colored foliage; showy and valuable for bedding purposes.. Half-hardy annual....... 10
" erinus (Queen of Whites), pure white flowers, not tinted with the slightest shade of any color. Blooms until destroyed by frost. Half-hardy annual. .................................. . . ...................... . . 10


Lobelia erinus (Crystal Palace), magnificent variety, with large blue flowers; one-half hardy annual..... 10
" erinis gracilis, very fine for baskets, vases, etc., trailing gracefully and blooming profusely. Halfhardy annual.

Lobelia cardinalis (Queen Victoria), scarlet, new scarlet flowering variety, with the darkest leaves, and very constant. Hardy perennial.

15
6 cardinalis (Cardinal Flower), a magnificent native variety, with spikes of brilliant scarlet flowers. Will flourish in any common soil. Hardy perennial; two feet high..
LONDON PRIDE.-(See Lychnis Chalcedonica.)

## LOPHOSPERMUM.

Beautiful climbers, with purple and violet blossoms; suitable for covering trellis work, etc. Tender perennial.
Lophospermum scandens, flowers violet-purple; ten feet high. ........

LOVE GRASS-(Eragrostis).
A very pretty species of ornamental grass, growing one foot high; splendid for winter bouquets. Hardy annual.
Eragrostis, clegans, beautiful, dancing spikelets.
. 5
LOVE GROVE-(Nemophila).
Of dwarf, spreading habit, it is well adapted for border or pot culture. The flowers are exquisitely blotched and


Love Grove.
spotted, sporting into an endless variety of shades of color. Hardy annual; six inches high.
Nemophila, mixed, several colors.
5
LOVE-IN-A-MIST-(Nigella).
This singular plant is known as Lady-in-the-Green and Devil-in-a-Bush, because the blossoms are partially concealed by the abundance of finely cut foliage. The plant and flower are both handsome and require but little care. Hardy annual.
Nigella Damascena fl. pl., double, blue blossoms; one and a-half to two feet high.
" Damascena nana |fl. pl., double, white and blue blossoms; one foot high.

## LUPIN-(Lupinus).

Very conspicuous plants, with spikes of pea shaped blossoms of various colors. They look well as a background to other low growing annuals. Hardy annual; about three feet high.
Lupinus Hartwegi, a beautiful species with delicate

." Cruikshanki, blossoms white, shaded with yellow, blue and purple..

## LYCHNIS.

There are few plants that produce such brilliant blossoms. The flowers are produced in clusters, and are constantly coming out all summer. Hardy perennials; one to three feet high.
Lychnis chalcedonica (London Pride), bright scarlet;
two feet high................................................ two feet high.
The following are perennial, but will blossom the first year.
Lychnis Haageana (Benary), elegant, large, scarlet blossoms with jagged petals; one foot high..... 10
$\qquad$
sieboldii, produces large, white flowers; two feet high. 15

* Haageana grandiflora gigantea, three feet high. The flowers are scarlet, much larger than any of the preceding..


## LYTHRUM.

A showy, perennial plant of easy culture, producing long, numerous spikes of bright rose flowers. Hardy perennial; two feet high. .
Lythrum roseum superbum

## MARIGOLD.

The marigold has been an inhabitant of the flower garden from time immemorial, and where a rich display of bloom is desired, is almost indispensable. The African varieties are tall, growing usually two feet or more, while the French are more dwarf, of most perfect form and gorgeous beauty; all are desirable. Hardy annuals, in bloom till frost comes.


Marigold, Meteor.
Marigold, African, Orange Quilled, a double variety with quilled petals; very showy

* African, E1 Dorado, this is a new development of the African Marigold, and is the very finest type of that showy autumn flower. The flowers are from three to four inches in diameter, perfectly imbri cated and extremely double.
© African, mixed, selected from the finest double flowers: very beautiful
c French, Tagetes signata pumila, bright yellow flowers; elegant habit. Finest varieties mixed.
* French, new gold striped, magnificent stripes of brown on deep gold: very double
6 Prince of Orange, Calendula officinalis fl. pl., large, double, dark orange striped flowers; very useful for cutting. Comes true from seed.
" Meteor, Calendula officinalis fl. pl., a splendid variety, with large, extremely double white and deep orange striped flowers. Lighter colored than Prince of Orange. Comes true from seed
" Cape, Calendula pongei fl, pl., double, white: fine. 5
" Cape, Calendula pluvialis, flowers] single, white, brown underneath.

MARVEL OF PERU-(Mirabilis).-(See Four O'Clock.)

## MARTYNIA.

Extremely handsome, large flowering, half-hardy annual. Martynia formosa (Fragrans), foliage thick, soft and velvety. Flowers delicate rose lilac. blotched and shaded with crimson. Very fragrant
" proboscidea, curious on account of its singular seed vessels, which are much esteemed, when young, for pickles.

MATHIOLA.-(See Stocks.)
MATRICARIA-(Feverfew).
Matricaria eximia grandiflora fl. pl. (Double Feverfew), white, double; desirable for bedding; one-half hardy annual

MACRANDIA.
Graceful climber for green-house. parlor, baskets, or outdoor purposes. Set out in the border with a little frame to which to attach their tendrils, they will be loaded all the season with rich purple, white and rose, foxglove shaped blossoms. Tender perennial climber; six feet high.
Maurandia, mixed, choicest kinds mixed.

## MESEMBRYANTHEMUM.

Mesembryanthemum crystallinum (Ice Plant), handsome and curious plant for hanging buskets, rock work, vases and edgings. The leaves and
stems are succulent and fleshy, and appear as though covered with ice crystals, and fook like rock candy. The whole plant is peculiarly brilliant in the sunshine. Tender annual trailer; six inches high: white
Mesembryanthemum cordifolium variegatum, the leaves are blotched with light yellow and cream colored spots. Fine for green-house or conservatory; half hardy annual; six inches high.
" tricolor (Dew Plant), pink with purple centre; half-hardy annual

## MIGNONETTE

A well known hardy annual, producing dense, semi-globular heads of exceedingly fragrant flowers, borme on spikes from three to six inches long. It is so fragrant that the whole atmosphere around is perfumed. If sown at intervals in spring and early summer, it will be in bloom till killed by frost. Seeds sown in autumn will bloom early in spring. Hardy annual; one foot high.
Mignonette, Golden Queen, golden yellow; powerfully fragrant
" Victoria, valuable; dark red blossoms.
" reseda odorata grandiflora, large flowered. The common Sweet Mignonette
" crimson flowered Giant, of robust habit. with very large spikes of handsome, crimson flowers of exquisite fragrance: a free and perpetual bloomer. 10
Parson's white Howering Giant, flowers almost pure white, of great fragrance. borne on spikes six inches to, a forit in length

- Dwarf Compact, a distinct and very desirable vari ety. It forms a dense, semi-globular bush about ten inches high and eighteen inches in diameter. Highly recommended for pot culture or market purposes. . 1
Tall Prramidal, has woody stems and rigorous branches clothed with dark green leaves and club like spikes of flowers ten inches long, of a fine red tinge
Pyramidal Bouquet, forms a dense, short pyramid, the numerous branches being terminated by large spikes of intense red flowers. Recommended for pot culture, and for the open border
.10


Mignonette, Machet, of dwarf and vigorous growth, throwing up numerous stout flower stalks, terminated by massive spikes of deliciously scented red flowers. One of the , very best sorts for pot culture.

MIMOSA.-(See Sensitive Plant.)

## MIMELUS.

Strikingly handsome flowers of easiest cultivation. Perennial in the green-house, annual in the open air. Start under glass
Mimulus moschatus (Musk Plant), cultivated on ac count of the musky odor of the plant
punctatus (Monkey Flower), large beautifully spotted blossoms; blooms first year.
" double (tigrinus duplex), splendid variety, with beautiful double tubed flowers

MINA LOBATA.
Very useful, rapid growing, summer climber of the Ipomea family. Flowers in long racemes, rosy-crimson at first.
changing to orange and pale yellow as they advance. Tender annual; fifteen feet high.
Mina lobata. $\qquad$ .....

## MOLUCELLA.

Molucca balm, or shell flower, is a very curious plant. Within the calyx a button shaped bud appears, which unfolds into a shell shaped flower of a white and purple color. It is a hardy annual, growing two or three feet in height with few leaves, but such numerous branches that its width is often as great as its height.
Molucella lævis. $\qquad$ .... ICA
A curious annual climber, with yellow blossoms and foliage similar to the canary bird flower. The fruit, the chief curiosity, is egg and pear shaped, and covered with warty

excrescences, and when ripe bursts suddenly open, scattering its seed and showing a brilliant carmine interior. Fine for trellises, fences, stumps, etc.
Momordica balsamina (Balsam Apple)
charantia (Balsam Pear).
MORNING GLORY-(Convolvulus*Major).
Handsome, showy climber of easy culture, and suitable for covering arbors, windows, trellises, old stumps, etc. It is so perfectly hardy as to grow in almost any soil. Hardy annual; ten feet high.
Convolvulus Major,

| 66 | "6 |
| :--- | :--- |
| 66 | "6 |
| 6 | 6 |
| 6 |  |

$\qquad$
(See also Convolvulus.)

## MONKEY FLOWER.-(See Mimulus.)

## MOON FLOWER.

The true Moon Flower is the most vigorous of all summer climbers; a single plant can easily be made to cover, by August 15th, a trellis thirty to fifty feet high and six feet broad, with a dense mass of leaves, studded every night or cloudy day with hundreds of beautifully white and wax like flowers four to six inches in diameter. Tender annual.
Moon Flower, Calonyction grandiflora. .25


Scabiosa Atropurpurea.

## MOURNING BRIDE-(Scabious).

Sometimes called Sweet Scabious. Very useful for bouquets, as their long stems work easily, and their striking colors, as well as fragrance, are desirable. Hardy annual; one to two feet high.
Scabiosa atropurpurea, deep purple. ..................... 5


## MUSK PLANT.-(See Mimulus.)

## MYOSOTIS. - (See Forget-Me-Not.)

NASTURTIUM, TALL-(Tropæolum Lobbianum).
The Lobbianum differs materially from the common running nasturtium, and is admirably adapted for green-house or conservatory decoration in winter. Colors brilliant and of many shades, from scarlet to black. Fine for covering arbors, trellises and rustic work. Hardy annual; ten to twenty feet high.
Tropæolum Lobbianum, Geant des Batailles, carmine.

15

tall mixed, the common tall varieties........................ . 5
NASTURTIUM DWARF-(Tropæolum Minor).
A bed of Dwarf Nasturtiums in the yard is very brilliant and attractive and blooms all the season. Hardy annual; one foot high.
Nasturtium, Dwarf, Crystal Palace Gem, sulphur, spotted maroon.

" Dwarf, scarlet.......................................... 5
" " Beauty, orange and vermilion.................... 5
" " " Yellow ............................................................................. 5
" " " Kose. of Tom Thumbs............................................... 5
" " Golden King of Tom Thumbs, brilliant
gold color........................................... 5


Nasturtium, Dwarf, Spotted King, yellow, spotted chocolate...................................................
" Dwarf, Ented foliage. Producing flowers of the most brilliant crimson color in great abundance........... 5
" Dwarf, mixed.

## NEMOPHILA.-(See Love Grove.)

## NIEREMBERGIA.

Charming little plants, well adapted for edgings, baskets, etc. One-half hardy annual.
Nierembergia gracilis, a fine bedding plant; white with purple eye; slender and graceful. One foot........ 10

NIGELLA.-(See Love-in-a-Mist.)

## NOLANA.

Beautiful, trailing plants, with prostrate stems, much branched; almost equal to the portulaca for growing in masses, and unsurpassed for rock work, pots, baskets or vases, as the branches hang pendulous over the edge of vase or basket. The blossoms are convolvulus shaped, brilliant, freely produced, and of various colors. Hardy, trailing annual; six inches high.
Nolana, mixed.

Charming little plants well adapted for rockeries and baskets. The flowers are borne on large heads, are of various:
colors, star shaped, and during the evening are very fragrant. Half hardy annual; six inches high.
Nycterinia capensis, white
mixed.

## NYMPHAA-(Water Lily.)

Hardy aquatic plants, bearing exceedingly beautiful, fragrant, white blossoms, which appear as if floating on the Water. Are increased by sowing the seed or by dividing the roots or tubers. They grow readily in ponds or streams of shallow water having muddy bottoms, and can be grown in aquariums, tubs or tanks, in the house, if there be sufficient mud at the bottom, and the seeds or roots be kept continually covered with water.

Cultivation in Tubs.-Take a strong barrel, free from tar. oil or salt. saw it in two. fill this one-third full with fine. black, garden soil, or meadow mud, if handy; plant the seed in this mixture, covering them one inch deep, add water gently so as not to disturb the seed, until the tub is full. Always keep the tub full of water. This is all the care needed. Set this on a brick or board platform in any place you desire. The tubs, with their contents, should be placed in a cellar during the winter, kept from frost, and not allowed to entirely dry up.

For Aquariums.-Put in five inches of fine, black loam, cover the seed one inch deep in this, and sift on enough fine sand to entirely cover the loam.
Nymphra odorata, white; fragrant. $\qquad$ .20

## CENOTHERA.-(See Primrose.)

## OLEANDER-(Nerium).

This well known shrub, originally a native of India, is of easy culture, and flowers freely the greater part of the year. In warm, moist climates, it requires no protection, and attains the proportions of a good sized tree. The flowers have a salver shaped corolla, with a crown of torn appendages in the centre, and are a beautiful shade of pinkish-red. Nerium oleander.
$\qquad$
.....

## OXALIS.

Tery pretty herbaceous plants with rich, rose colored blossoms. They thrive well in a mixture of loam and sand. Desirable for green-house decoration, rock work or baskets out of doors. Half hardy perennial.
Oxalis rosea, rose colored.
10
fleribunda alba, white.
10

## PAEOY.

New varieties of these justly popular flowers are obtained from seed, and are sure to repay the little care required.
Pæony herbacea (Chinensis), from a splendid collection of finest double sorts of all colors.

Chamærops excelsa (Hempen Palm of China), is a green-house variety in our climate. As a lawn plant in our Southern States, nothing could be more conspicuously attractive. A well grown specimen will attain the height of twenty-five or thirty feet. 25

PAMPAS GRASS-(Gynerium).
Magniffcent, ornamental grass, producing numerous flower stems surmounted by plumes of silvery inflorescence. Halfhardy perennial, from South America; ten feet high.
Gyneriutm argenteum

## PANSY.

These lovely flowers are favorites with all, not only for the brilliancy and variety of their colors, but for the durability of their bloom

The following varieties we have imported from the best English, German and French florists and can recommend them with confirlence. They are surid from the rhoicest and largest flowers. and comprise all shades of color, from pure white to King of the Blacks.
Pansy, Emperor William, indigo, dark centre.

## King of the Blacks, coal black

## Odier, or large stained, large, each petal blotched.

pure yellow
variegated and striped, fine....................................... 10
white, pure
purple, white edged
sky blue
gold margined.
mahogany colored

> violet, white edged

Lord Beaconsfield, the ground color is purple-violet shading off in top petals only to a whitish hue, a peculiarity which lends to the whole flower an unusually bright appearance.

Trimardeau, very large flowered, mixed, an entirely distinct and beautiful race with flowers of the richest and most varied shades of color. Plants of vigorous and compact growth, and the flowers. which possess unusual substance and consistency, are each marked with three large blotches or spots. 10
" Red Flowered, Victoria, this is a new color among pansies. The large blooms are of good substance and form and deep claret-red, similar to that of the blood-red variety of single wall flowers. They come very true from seed.

* Bugnot's Very Large stained, mixed, a large flowering race; plants vigorous, with short stalks bearing well above the foliage large flowers of fine form and substance and very brilliant and varied in coloring. Extra fine.
extra choice, mixed, from choicest named flowers. 1
choice mixed
fine mixed.
collection of thirteen splendid varieties...... 100


## PALM-(Chamærops).

The palm is perhaps one of the most ornamental plants in the green-house, and those varieties that are hardy enough to bear planting out in the lawn during warm weather are sure to command attention.
Chamærops humilis (Dwarf Fan Palm), the most hardy and dwarf of its species, seldom attaining over eight or ten feet in height ...... 15


## PASSION FLOWER.

A most interesting and well known order of climbers, bearing singularly beautiful flowers. We have selected two varieties which seem best adapted to our climate, being more hardy than many other sorts.
Passiflora coerulea, hardy, deciduous climber, with blue and white flowers of remarkable beauty
" coccinea (Disemma), magnificent green-house climber, with brilliant scarlet blossoms in the form of a double coronet or crown.
. 20

## PEAS-(Lathyrus).

A perennial climber, producing a long succession of white, rose, and purple blossoms, in clusters of eight or ten each. Suitable for trellises, arbors, etc. Hardy perennial; ten feet high.
Lathyrus latifolius, rose . ....................................... . . 10
"6 latifolius, white...
" 6 mixed perenniai............................................ 15
" odoratus (see Sweet Peas).

## PENNISETUM-(Ornamental Grass).

Useful for the formation of winter bouquets. Heads barbed and feathery, and present a beautiful appearance when mixed with Gomphrenas and other immortelles. Perfectly hardy, and will grow in any, common soil. Hardy annual.
Pennisetum longistylum, two feet high ................... 5

## PENTSTEMON.

Handsome, half-hardy, herbaceous perennials, deservedly much in favor for bedding out. Flowers bell shaped in racemes or spikes constantly produced throughout the season. No one who has ever seen their beauty will willingly do without them.


Pentstemon Hartwegi, splendid mixed; flowers brilliant and very striking. Two feet high........................ 10
" Murrayanus, one of the best, a single spike has been known to produce upwards of fifty blossoms;
flowers rich, shining scarlet; three feet high........ 10
" choice named varieties, seed saved from collection of best varieties, and cannot fail to give satisfaction..

## PERILLA.

Ornamental foliage plants similar to Coleus. Fine for bedding with silver leaved plants. Foliage metallic bronze. Same culture as for Coleus. Half-hardy annual.
Perilla nankinensis atropurpurea laciniata.
PERIWINKLE.-(See Vinca).

## PETUNIA.

Petunias are unsurpassed for massing in beds. Their richness of color, duration of bloom, and easy culture, will always render them popular. They do well sown in open border in spring, or earlier in cold frame or hot bed, and transplanted eighteen inches apart. Tender perennial, but will bloom the first season. One and a-half feet high.
It is perhaps not generally understood that the seeds of double petunias are only obtained by artificially fecundating single blooms with the pollen from the double, and the progeny cannot all be expected to come double. The finest double petunias are always grown from seeds.

Petunia nyctaginiflora, pure white......................... 5 throat.............................................................. 10


Petunia hybrida, finest striped and blotched, saved from magnificent collection of striped and blotehed varieties.
" hybrida inimitabilis nana compacta multiflora (inimitable dwarf), compact, eight inches in height, covered with regularly striped flowers. Effective either for massing or pot culture........................... 15
" hybrida, fine mixed.

## LARGE FLOWERING SECTION.

Petunia hybrida grandiflora marginata, fine, green edged varieties, beautiful..
" hybrida grandiflora, Prince of wurtemberg, " hybrida grandifiora, Princess of wurtemberg 20
purple. ............................................................



Petunia, Double fringed.
Petunia, large flowered, mixed, saved from largest flowers
" hybrida grandiflora, choicest mixed, seed saved
from show flowers .......................................... 15

## FRINGED SECTION.

Petunia, fringed varieties, mixed, very desirable..... 20

## DOUBLE FLOWERING SECTION.

Petunia, double mixed, finest varieties carefully fecundated with best double flowers. Sure to produce a good percentage of double flowering plants....
" hybrida grandiflora robusta f1. pl., new, dwarf, of robust growth, forming a compact, upright, branched bush, about ten inches in height and fourteen inches in width, with double, sometimes even double fringed flowers in all shades of colors existing in petunias. An extremely handsome, valuable sort for market culture.

- extra double fringed, many colors, beautifully fringed, a good percentage double; new ...... .... 5


## PHACELIA.

A curious and interesting hardy annual. It makes a pretty border plant and is good for bee food.
Phacelia congesta, blue. $\qquad$

## PHLOX.

Very hardy annuals, thriving in almost any situation, and unequaled in the magnificent display of their many and brilliantly colored flowers. Seed sown in open ground in fall or early spring will begin flowering July first and remain literally covered with bloom until after severe frosts late in autumn. For masses of separate colors or for cutting for bouquets, they are unsurpassed. One foot high.
Phlox Drummondii grandiflora alba, pure white; our own stock. Comes absolutely true from seed; is of perfect form and color
\%6rum. grandifi. scarlet, black center................... . 10 "6 rosea, deep rose.

Black Warrior, fine
"6 Leopoldii, red, white eye
alba oculata (superba), white
purple eye.
brilliant, new; brilliant rose, dark red centre. 10


Phlox Drumondil Grandiflora Splendens.
Phlox Drum. grandifl. splendens, vivid crimson, pure white eye; one of the finest of this splendid strain

10 stellata splendens, rich crimson with star
shaped white eye. Very effective; rare...... shaped white eye. Very effective; rare .25 Graf Gero, of fine, compact growth, very effective in pots.
.25 extra, choicest mixed, composed of the best varieties of the grandiflora species; very choice. 10 fine mixed, many fine varieties.

## PHLOX PERENNLAL.

The varieties of perennial phlox are among the choicest of our flowers for bedding and border plants. They are perfectly hardy and need no protection; will flourish in any soil, succeeding better, however, in deep, rich, rather moist ground.
Phlox perennial, mixed, seeds saved from the newest splendid sorts

## PINK-(Dianthus).

The dianthus family is naturally one of the most useful and beautiful. including as it does, the Carnation and Picotee. Sweet William, Florist's, Chinese and Japan pinks, in all their varieties.
Dianthus Chinensis fl. pl. (Double China Pink), a biennial of dwarf habit; Howers the first year, but the bloom is stronger the second. The colors are rich and varied

Dianthus Chinensis Heddewigii fl. p1. (Heddewig's Pink), flowers very large and double, having a diameter of nearly three inches; of various shades of brilliant colors. Half hardy annual.


Dianthus Chinensis Heddewigii, single mixed, fiowers deeply fringed or feathered; very fragrant and of the most brilliant colors. One-half hardy annual..
Chinensis Heddewigii diadematus (Double Diadem Pink), of denser growth than the Heddewigii, and of dwarfer habit. Very regular. densely double, and of all tints, from crimsonpurple to deep black-purple. One-half hardy annual. 10
" Chinensis imperialis fl. pl. (Double Imperial Pink), a superb double variety from China.
Chinensis laciniatus fl. pl. (Double Japan Pink), to be properly appreciated, these should be seen; rich in hue, very double, deeply fringed petals-only lacking fragrance to make them perfect. Half hardy annual
. 10
Plumarius Scoticus fl. pl. (Double Florist's Pink), saved exclusively from Mr. Turner's very best varieties of show pinks; extra.

50


Pink, Flonist's Double.
The following two varieties are selections from the finest formed varieties of Dianthus Heddewigii, and are remarkably fine.
Dianthus Heddewigii, Eastern Queen, beautifully marbled; the broad bands of rich mauve upon the paler surface of the petals are very striking and pretty. One-half hardy annual.
"Heddewigii, Crimson Belle, rich, vivid crimson like color; flowers of extraordinary size and substance, evenly and finely laciniated. One-half hardy annual
، barbatus (see Sweet William)
" caryophyllus (see Carnation).

## POPPY-(Papaver).

Well known hardy annuals flowering in great profusion throughout the summer, if seed is sown early in the spring.


Papaver bracteatum, superb, large, orange-crimson flowers

* Orientale, large, gorgeous, scarlet blossoms; bottom of petals black; beautiful
" umbrosum, rich vermilion, with a shining black spot on each petal; one of the most showy of all the varieties
" carnation white, fine large double white flowers
" carnation, mixed, large, showy, double flowers 5
various colors; two feet high.
The last variety, under the name of Papaver somniferum, is the sort used extensively for the extraction of opium.


## PORTULACA.

There are scarcely any? flowers in cultivation that make such a dazzling display of beauty as a bed of many hued, brilliant colored portulacas. They are in bloom from about the first of July till killed by frost in autumn. Tender annual; nine inches high. 1


Portulaca alba, pure white..
"
" aurea, deep golden.....
" caryophylloides, carnation striped ........................... 5
' fine mixed, many beautiful kinds.

## DOUBLE VARIETIES.

Blossoms about one and a-half inches across, perfectly double, and of many colors. Not all the plants will come double, but the single ones can be pulled out. They will stand any amount of dry weather.
Portulaca, double, white
.20

66 6 mixed ........ ................................... 15

## PRIMROSE, EVENING-(CEnothera).

Produces large, showy blossoms, which are fully expanded only towards and during evening. Blossoms three to four inches across, usually yellow or white, and very freely and constantly produced.
CEnothera acaulis alba, of prostrate habit, the leaves lying on the ground; produces an abundance of large, white flowers about three inches across. Hardy perennial; six inches high..
" Lamarckiana, superb spikes of large bright yellow blossoms about four inches across. Hardy biennial, but blooms the first year; four feet high...... 5
" gigantea, the stem grows very tall, changing at about two-thirds its height into an immense spike of bright yellow flowers. Very showy. Hardy biennial, but flowers the first year; height three feet. 10

PRIMULA SINENSIS-(Chinese Primrose).
These are perhaps the most desirable of all house blooming plants. They are in almost constant bloom all winter, and if tne plants be transferred to the border, they will bloom nearly all summer. Though perennial, new plants flower more freely, and seed should be sown every year.


Primula Sinensis.
Primula sinensis fimbriata, scarlet, extra
" sinensis fimbriata, rose, rose varieties mixed
" sinensis fimbriata, Village Maid, pure white...... 25 " sinensis fimbriata alba maxima, flowers large, of great substance, finely fringed, pure white, extra.
.50
" sinensis fimbriata coerulea, new, distinct, flowers blue (a color hitherto unattained in the primrose), large and of great substance. A novelty of the highest merit.
" sinensis fimbriata punctata elegantissima, the darkest primula known; flowers velvety crimson, admirably fringed and regularly spotted on the edge with white
.50
" sinensis fimbriata filicifolia, choicest fern leaved, mixed, dark carmine and pure white ...... 25
" sinensis fimbriata, choicest mixed, from Mr. James' choicest strains of best fringed varieties, all colors mixed.

## DOUBLE VARIETIES.

The following four varieties can be relied upon to come true from seed. They are very choice, and highly recom mended for florists.
Primula sinensis fimbriata, double crimson... ..... 50 "6 "* ${ }_{6}$ "، white.......... 50 "6 "6 "6 $\quad$ " $\quad$ "6 red.................. 50
" Japonica, mixed, the beautiful, fine, large, various colored flowers stand in whorls, pyramidically arranged on stout flower stems, which are over one foot high.
It is sometimes difficult to get Primula Japonica to germinate. After sowing the seed let the plants remain in a cool
and moist place for four or five weeks, then place them in a frame or house where there is bottom heat, and the seed will grow freely.

## PYRETHRCM-(Feverfew).

(Also see Matricaria.)
Very useful, and universally admired, ornamental foliaged bedding plants, deserving a place in every garden. Sow from December to April, in shallow boxes, in a temperature of $60^{\circ}$. As soon as the young plants can be handled, transplant singly into small pots or shallow boxes, where they may remain until the time of planting out into the open ground in May.


## Pyrethrum Roseum.

Pyrethrum parthenifolium aureum (Golden Feather), beautiful, gold leaved bedding plant, retaining its ornamental character until late in autumn. Flower white; height one foot
" parthenifolium aureum selaginoides, has finely cut, fern like leaves of bright golden yellow color. Extra fine for bedding. Height one foot. Half hardy..
Pyrethrum roseam.-From the dried and powdered flowers of this is made the famous insecticide, Persian Insect Powder. Flowers large, yellow and rose colored; handsome. Hardy perennial; height two feet.

Ccluture. - Sow in boxes of prepared soil, as early as the season will permit, and transplant to sixteen inches apart whenever the plants are large enough. The largest crop of flowers is produced the second season. They should be gathered when in full bloom, dried carefully, and stored in paper bags. Before using, the flowers should be powdered as fine as possible. Per pkt. 10c., oz. \$1.00.

## QUAKING GRASS.-(See Briza.)

## RHODANTHE-(Everlasting).

The finest and most beautiful of all the many varieties of everlastings. Flowers of various colors, pure silvery white with yellow disc, rosy crimson and bright purple, rose suffused with white, ete. For winter bouquets, the blossoms should be gathered before fully expanded, and if dried in the shade will retain their brilliancy for years. Tender annual; one foot high.


Rhodanthe Manglesi, rick rose and white color
" Manglesi, double, a curiosity; produces ten to fifteen per cent, of double blossoms.

25
" maculata, rosy crimson, bright purple or white with
golden centre................................................
maculata alba, pure white, with yellow disc; elegant

10
10

## RICINUS.-(See Castor Bean.)

ROCKET-(Hesperis).
The Sweet Rocket produces clusters of flowers which are very fragrant during the evening. The seed readily germinates in the open ground with very little care. Hardy perennial; one and a-half feet high.
Rocket, Sweet, purple.
ROSE CAMPION,-(See Agrostemma Coronaria.)
ROSE OF HEAVEN.-(See Agrostemma Cœli-rosa.)

## SALPIGLOSSIS.

Very showy bedding or border plants, with richly colored, erect, funnel shaped flowers. The colors are beautifully marbled and penciled, purple, scarlet, crimson, yellow, buff, blue, and almost black. Bloom from August to October. Tender annual; one and a-half to two feet high.
Salpiglossis, large flowered hybrids, extra fine mixed; purple, scarlet, crimson, yellow and blue.

## SALVIA-(Flowering Sage).

Very ornamental; flowers borne in spikes of fiery red, crimson or blue, and continue in bloom in open ground until after severe frosts. Start in heat and transplant into light soil one to two feet apart


Salvia Roemeriana, deep crimson; tender annual, one foot high

10
The following are half hardy perennials, but bloom the first season; two to three feet high.
Salvia splendens compacta. Bruantii of Florists, the finest salria grown. being literally covered with brilliant scarlet hossoms.
" patens, one of the brichtest and purest of all blue flowered plants, and holds a preeminent position...2)

## SANVITALIA.

Very pretty, dwarf, trailing plants, excellent for rock work. borders or edging of beds. It is so completely covered with flowers as to nearly hide the foliage. Flowers double, of a brilliant golden yellow, resembling a miniature double Zinnia. Hardy annual; six inches high.
Sanvitalia procumbens fl. pl..
10
SCABIOLS.-(See Mourning Bride.)
SCARLET FLAX.-(See Linum.)

## SEDCM.

A species of low, succulent plants, some of which are remarkably pretty: grow readily upon stones, rocks, walls and roofs of houses; are admirably adapted for the centre of hanging baskets.
Sedum coeruleum, the common blue sedum, frequently known as Blue Stonecrop. Hardy annual; six inches high.

SENSITIVE PL.ANT-(Mimosa).
An interesting and curious plant, with globular heads of pink flowers, well known for the extreme irritability of its

## D. M. FERRY \& CO'S DESCRIPTIVE CATALOGUE.

leaves and foot stalks, which close and droop at the slightest touch, or in cloudy, damp weather, and during the night. Tender annual; height one and a-half feet.
Mimosa pudica.

## SMILAX.

No twining plant in cultivation surpasses this for the graceful beauty of its foliage. In cut flowers, and for wreaths, etc., it is indispensable to florists. Its hard texture enables it to be kept several days after being cut, without wilting. Nothing is finer for clothing statuettes, vases, etc. The seed germinates very slowly, sometimes requiring three or four months. Tender perennial climber; ten feet high.
Myrsiphyllum asparagoides (Smilax).
. 15

## SNAPDRAGON-(Antirrhinum).

An old, favorite, border plant, with dark and glossy leaves, and large, curiously shaped flowers with finely marked throats. They have been much improved of late years by careful selection. They blossom the first season from seed sown in spring. Tender perennial; one and one-half to two feet high.
Antirrhinum majus album, pure white
" majus, brilliant, crimson, white throat
" fine mixed, all the best color . 5

## SOLANUM.

Ornamental fruit bearing plants, useful for conservatory decoration, and present a beautiful appearance in the drawing room. The foliage is handsome and the fruit is very attractive in appearance, but not edible.


Solanum Pseudo Capsicum.
Solanum pseudo capsicum, covered with a profusion of miniature, pepper shaped, scarlet fruit
.10

## STIPA.-(See Feather Grass.)

## STOCK.

The stock as now grown, is indispensable where a fine display of flowers is wanted. To such perfection has selection brought them, that good seed will give a large proportion of flowers as double and large as the named sorts grown from cuttings.
Stock, double German Ten Weeks, mixed, fine....... 10 Stock, dwarf German Ten Weeks, pure white, large flowering.

## INTERMEDIATE OR AUTUMNAL

The intermediate stocks, if sown at the same time as the "Ten Weeks," will succeed them in bloom, thus affording continuous bloom until late in the fall. If sown in pots, late in the summer, they will bloom the following spring.
Stock, Intermediate, white.
searlet
.15

## BROMPTON AND EMPEROR.

These Stocks should have the same treatment as the intermediate. They cannot endure our winters unless protected. Stock, Brompton, mixed, blooms well in winter; flowers very fragrant. Half hardy biennial; one and a-half feet high.

Stock, Emperor, or Perpetual, mixed, the magnificent spikes of bloom are very rich and attractive, and for individual specimens are unequaled. Tender perennial; one and a-half feet high

## SUMMER CYPRESS.-(See Belvidere.) <br> SUNFLOWER-(Helianthus).

Adapted by its stately growth for a background to a lawn, or a screen to hide unsightly places. It is also raised as an absorbant of miasma in damp or ill-drained situations, thus preventing fevers. Hardy annual; five feet high.
Sunflower, double (Helianthus Californicus fl. pl.).. 5
" Large Russian, tall growing, single variety, often fifteen to twenty feet high; the stalks are sometimes used for fuel.

SWAN RIVER DAISY.-(See Brachycome.)
SWEET PEAS.

## (Lathyrus Odoratus.)

Few flowers are more deservedly popular than these showy, free flowering climbers. The purity and brilliancy of their coloring and their peculiar and graceful form make them universal favorites. We have carefully tested most of the named varieties, and present our collection as the finest in cultivation.
Culture.-Sweet peas should be sown in drills, as early as possible in spring, in rich, friable soil. Prepare the bed by thoroughly working in a large quantity of well rotted manure. Make a trench six inches deep. In this sow the seed and cover two inches deep. As soon as the plants begin to show through, fill in the trench. This will secure a deep planting without the bad effect of deep covering of the seed at first, and so enable the plant to bloom continually through the heat of summer. As fast as the flowers come into full bloom or fade, they should be cut off, for if the pods are allowed to form, the plants will stop blooming.

## A MAGNIFICENT SWEET PEA.

## MISS BLANGHE FERRY.

This is undoubtedly the most popular floral ${ }^{\text {En novelty }}$ of recent introduction. We sent it out in 1889 in packets only. The Detroit florists were so pleased with it as they saw it growing on our trial grounds that they bought it in quantities, even at packet rates, and were so well satisfied with the results and so impressed with its many good qualities that they planted it largely under glass, where it proved to be, beyond doubt, the best sweet pea in existence for forcing. Our claims for this splendid pea are these:
It is of dwarf and very compact growth, requiring no support.
It is hardier than other varieties, which with its dwarf and extremely compact habit makes it especially desirable for forcing.
It produces earlier flowers than any other variety-fully ten days earlier.

It produces more flowers than any other variety. The vines are completely covered with them.
The flowers have longer stems than other varieties, a point very important to the florist.

It produces finer flowers than any other variety-immense pink and white flowers, of perfect form.

It holds longer in bloom than other varieties.
Compared with Painted Lady-the most popular sort, on the whole, hitherto-the flowers have a far deeper, richer coloring and greater fragrance. Their color when massed presents such a gorgeous picture as to stop the passer by and elicit expressions of admiration, while their fragrance is so far reaching as to be phenomenal.
Extensive trials for three years justify our assertions and prove this pea to be all that we claim for it. The Massachusetts Horticultural Society, hundreds of florists, and thousands of amateurs who plant it and demand it in preference to any other variety, all unite in giving it words of unstinted praise.
Sweet Pea, Miss Blanche Ferry, packet 5 cents; twelve packets 50 cents; ounce 40 cents.


## OTHER NEW AND STANDARD SWEET PEAS.

Boreatton, new, particularly handsome, large flowers of a rich, glossy chestnut color
Indigo King, a strong growing and very prolific sort, bearing a profusion of large flowers with dark maroon standard and clear indigo blue wings. Very handsome..
.10
Princess Beatrice, a vigorous grower and free bloomer; flowers a clear and beautiful carmine-rose, slightly shaded.
Queen of the Isles, scarlet mottled, and flaked with purple and white.

10
Adonis, carmine-rose, shaded with white, very desirable.. 10 Eckford's Hybrids, this is mixed seed from the many beautiful hybrids produced by this celebrated grower. It will produce a large range of colors; the flowers are quite uniformly of fine form and substance.
Invincible Scarlet, plant vigorous; flowers of intense and brilliant scarlet-pink, of the largest size; the most brilliant variety yet produced.
" Black, the darkest variety yet sent out and desirable on account of its intense color
" White, the stock we offer produces very large flowers of fine form and clear white color
Striped
Painted Lady
Mixed, includes all the new sorts, extra
. 5

Collection, one each of twelve kinds named above, including Miss Blanche Ferry

## SWEET SULTAN-(Centaurea).

Produce a striking effect in mixed borders, and are useful for forming bouquets of cut flowers in connection with other colored flowers. Hardy annual; two feet high.
Centaurea moschata atropurpurea, double purple.... 5
SWEET WILLIAM-(Dianthus Barbatus).
For display in the garden the Sweet William is unsurpassed. The seed can be planted very early in the spring, in open ground, and will blossom the following autumn; or it can be sown in August, and will make fine blooming plants for spring. Hardy perennial; one and a-half feet high.
Dianthus barbatus, pure white, pure white flowers... 10 " black, reddish, velvety black ...... 10 mixed double, perfectly double, and great variety of colors

## TAGETES.-(See Marigold.)

## TASSEL FLOWER-(Cacalia).

A showy plant of easy culture, producing beautiful, scarlet and golden yellow, tassel shaped blossoms, from July to October. It is sometimes known as Flora's Paint Brush. Hardy annual; one and a-half feet high.
Cacalia coccinea, scarlet.
6" aurea, golden yellow
6 mixed.

## TORENIA.

A fine annual, with large, sky blue blossoms, with three spots of dark indigo blue, and a yellow stain in the center. Extremely handsome grown in pots or shaded border.
Torenia Fournieri superbiens, the darkest spotted varieties.

## TREE CYPRESS-(Ipomopsis).

A handsome plant, with fine, feathery foliage, somewhat like that of the cypress vine, and with long spikes of beautiful flowers; equally desirable for out-door or conservatory cultivation. Half hardy biennial; three feet high.
Ipomopsis elegans, mixed
5

## TRITOMA.

An interesting, half hardy, summer and autumn blooming perennial, producing magnificent spikes of rich, orange-red flowers.
Tritoma uvaria grandiflora.
TROPAEOLUM LOBBIANUM.-(See Nasturtium, Tall).
TROPAELUM MINOR.-(See Nasturtium, Dwarf.)
TROPAEOLUM PEREGRINUM.-(See Canary_Bird Flower.)

## VALERIAN-(Polemonium).

An old, standard border plant, often called Jacob's Ladder, from its pinnately cleft leaves. Flowers blue, nodding, at the ends of upright stalks. It blooms in June is of easy cultivation and perfectly hardy. Perennial; two feet high. Valerian, Greek (Polemonium cœeruleum).

## VERBENA.

No plant is more generally cultivated, or more eagerly sought after than the verbena, and no plant excels it for
masses in beds on the lawn. In the varieties may be found every color except yellow. If sown in open ground in May, they will bloom in August, but if started in the house, in pots, in winter, they will be in bloom sooner. Half hardy perennial trailer; one foot high.
Verbena aubletia grandifiora, reddish-purple..... .... 5
"\% niveni, white; sweet scented...................................... 10
" Menosa, rich purple...................................... our winters out of doors; rose, changing into lilac.. 10
" hybrida scarlet, scarlet blossoms....................... 15
Defiance, seed may be relied upon to produce the true, deep scarlet color..........
" ${ }^{6} \quad$ is $\quad$ Italian shades of blue............................... 15
" $6 \quad$ " blue, all shades of blue.................................. 15
auriculæflora, various shades, all with distinct eye of white or rose................. maxima perfecta alba, produces large, pure white flowers; fine for florists; comes true from seed
compacta, mixed, distinct. The plant forms a compact bush about five inches high and eighteen across, covered throughout the season with large trusses of white, scarlet and violet flowers......... 2
" mammoth, mixed, of our own growing, embracing a wide range of colors. This will please all who give it a trial.
.25
" extra choice mixed, seed saved from named flowers; very choice.
.20
" 6 fine mixed, embraces all colors............................. 10
mixed

## VINCA-(Periwinkle).

A genus of ornamental, free flowering green-house perennials, with glossy green foliage and beautiful circular flowers. May be planted in warm, sunny border during summer. Two feet high.
Vinca rosea, rose.
" $\quad$ " alba, white, with crimson eye. 10

## VIOLA TRICOLOR.-(See Pansy.)

## VIOLET-(Viola).

Well known free flowering hardy perennials, easily grown from seed. Succeed best in a partially shaded moist situation. Height six inches.


Violet, Sweet Scented.
Violet, Sweet Scented (Viola odorata semperflorens), flowers blue; fragrant.
hite (Viola cornuta alba), large, white blossoms. 10
" Viola lutea grandiffora, large yellow flowers...... 10
" Mauve Queen, mauve colored.
10
" Purple Queen, deep, fine purple.
.10

## VIRGINIA CREEPER.-(See Ampelopsis.)

## VIRGINIA STOCK-(Malcomia).

Hardy annuals, very useful for border or edging. A continual succession of blossoms may be kept up the whole season by sowing at intervals through the spring and summer. The flower and plant are quite as desirable as the Candytuft; grows about nine inches high.
Virginia Stock, red and white mixed.

WALL FLOWER-(Cheiranthus Cheiri).
The large, massive spikes of the wall flower are very conspicuous in beds and borders, and are very useful in making bouquets. Sow the seed early, in hot-bed, and while the plants are small, prick them out into pots, and sink the pots in the earth. On approach of cold weather remove the pots to the house, and they will bloom all winter. Tender perennial; one and a-half feet high. Wall Flower, mixed double
.10
Early Brown, brownish red, fragrant flowers; large, thick spikes; early. Tender biennial

10

* Tom Thumb, Golden, free flowering, of dwarf and compact habit; recommended for spring bedding. . . 15


## WHITLAVIA.

A pretty plant with delicate, handsome foliage, producing a constant succession of bright blue and pure white bell shaped flowers, in drooping clusters, half an inch in length. Hardy annual; one foot high.
Whitlavia grandiflora. $\qquad$
$\qquad$

## WIGANDIA.

Very ornamental plants with immense veined leaves and stems covered with crimson hair. It grows rapidly, and should be formed into a bush. Its large leaves and clusters of lilac flowers, which continue to open in succession for a long time, lend the plant a tropical aspect, and make it valuable for garden and lawn decoration. Wigandia caracasana

## WISTARIA.

One of the most beautiful and rapid growing of hardy climbers. Frequently blooms both in spring and fall; the pale blue pea shaped flowers are borne in long, drooping clusters similar in size and shape to a bunch of grapes. It thrives best in a light, rich soil. Wistaria magnifica
.20

## XERANTHEMUM.

Of neat, compact habit, free flowering, and of the easiest cultivation. The leaves are covered with a silvery down,
and the flowers are pure white, deep purple and yellow single and double. If gathered before fully opened, and dried in the shade, they will retain their beauty for years. Hardy annual; one foot high.
Xeranthemum, mixed.
.10

## ZEA MAIZE-(Striped Japanese Corn).

A variety of corn with ornamental foliage of much beauty, the leaves being striped with green and white. Half hardy annual; six feet high.
Zea Japonica fol. variegatis, striped foliage

## ZINNIA.

A very showy plant, with large, double flowers, which, when fully expanded, form hemispherical heads, become densely imbricated, and might easily be mistaken for dwarf dahlias. Half hardy annual; one and a-half feet high.
Zinnia, double, carmine..

| 66 | 6 | scarlet. |
| :---: | :---: | :---: |
| 66 | 66 | purple. |
| * | 66 | crimson.. |
| 66 | 66 | orange |
| 66 | 46 | lilac.. |
| 66 | 66 | deep scarlet |
| 66 | 66 | deep purple |
| 66 | 66 | alba plenissima, pure w |
| 66 | 66 | choice mixed, very fine |
| 66 | 6 | mixe |

Haageana fl. pl., a dwarf variety with small, very double flowers of a deep orange color; fine for cut flowers; height one foot
Pompon, double, mixed, a new strain of this popular flower in which all the colors peculiar to the zinnia are found. The flowers are about half the size of the ordinary zinnia; very double.
6 Darwini fl. pl., a distinct and handsome class, comprising nana compacta, major, pyramidalis and vitata. The seed we offer is a mixture of each of the above.

## CHOICE FLOWER SEEDS IN BULK.

For such of our customers as make extensive sowings of Flower Seeds, and for florists who require larger quantities of Flower Seeds than are usually sold in packets, we offer some of the leading sorts by weight. This list embraces the most desirable kinds for bedding, edging and ornamental planting. Those who plant largely will find this a very economical mode of securing their seeds. We send free by mail, at prices annexed, but no discount or premiums can be allowed on Flower Seeds by weight. Half ounces will not be supplied of such kinds as sell for less than 50 cents per ounce.

| Ageratum, Mexicanum | PER OZ. |
| :---: | :---: |
| Alyssum, sweet. | 0 |
| Amaranthus tricolor (Joseph's Coat). | 40 |
| Aquilegia, fine mixed (Columbine). | 75 |
| Aster, mixed German quilled | 75 |
| "6 Victoria, fine mixed ... | 00 |
| " Truffaut's Perfection, mixed. | 00 |
| " " ${ }^{\text {c }}$, snow w | 00 |
| Balsam, double camellia, mixed. | 00 |
| " double white. | 25 |
| "6 mixed double dwa | 5 |
| " mixed double tall | 60 |
| Canary Bird Flower | 100 |
| Candytuft, white, fragra | 30 |
| ". white rocket | 40 |
| " fine mixed, per | 9 |
| Canna Indica, mixed. | 40 |
| Carnation, extra choice double mixed | 400 |
| Centaurea candidissima, $\$ 150$ per 1,000 seeds. gymnocarpa, silvery foliage | 100 |
| Cineraria maritima candidissima (Dusty Miller) | 100 |
| Coboea Scandens, rapid, handsome climber | 50 |
| Convolvulus major (Morning Glory) per lb., 75 c . miner, mixed (Dwarf Morning Glo | . 15 |
| Cypress Vine, scarlet ........................................................... | 50 |
| " " mixed | 40 |
| Dahlia, double | 150 |
| Daisy, mixed double | 0 |
| Dianthus chinensis fl. pl. (Double China Pink) | 50 |
| Digitalis (Foxglove) mixed....................... | 75 |
| Forget-Me-Not, myosotis alpestris | 50 |
| Gourd, Japanese Nest Egg... | 50 |
| " siphon, or dipper.. | 30 |
| " mixed ornamental | 40 |
| Heliotrope, dark varieties mixed | 150 |
| Hollyhock, double, pure white | 50 |
| "\% "6 salmon. | 150 |
| " " crimson. | 50 |
| "6 Chater's finest double mixed | 200 |
| " fine double mixed. |  |
| Job's Tears | 20 |
| Lantana, finest hybrids, mixed. | 75 |
| Larkspur, double dwarf rocket, mixed | 30 |
| Lobelia erinus gracilis, blue. | 60 |
| Marigold, Meteor. | 35 |
| Marvel of Peru (Four O'Clock), mixed | 20 |

Alyssum, sweet40Aquilegia, fine mixed (Columbine)Aster, mixed German quilledVictoria, fine mixed75
00Balsam, double camellia, mixed.
" double white.125
mixed double tall. ..... 60
Candytuft, white, fragrant. ..... 30
white rocket ..... 40
Canna Indica, mixed ..... 00
centaurea candidissima, $\$ 150$ per 1,000 seeds. ..... 00
Coboea Scandens, rapid, handsome climber ..... 150
20Cypress Vine, scarlet
Dahlia, double40 ..... 400
Daisy, mixed doubl
Daisy, mixed doubl
Digitalis (foxglove) mixed ..... 5
Gourd, Japanese ..... 50
, mixed ornamental
40
Hollyhock, double pure white. ..... 150
Chater's finest double mixed. ..... 150
fine double mixed. ..... 100
Job's Tears20
Larkspur, double dwarf rocket,Marigold, MeteorPrince of Orange30Morvel of Peru (Four O'Clock), mixed.35

| Mignonette, Golden Queen. |  |
| :---: | :---: |
|  |  |
| pyra |  |
| pyrami |  |
|  |  |
| Momordica balsamina..... Nasturtium, dwarf mixed |  |
|  |  |
|  |  |
| ansy, Emperor William.... |  |
| King of the |  |
| " pure yellow.... |  |
| " pure white |  |
| " sky blue.... |  |
| "6 Trimardeau, very large flowered, |  |
| " 6 extra choice mixed, from named flowers |  |
|  |  |
| Perennial Peas, white............................................................................ 1 |  |
| Petunia, choice mixed ..................................... 1 |  |
| Phlox Drummondii, choice mixed ............................. 1 " " fine mixed. |  |
| Poppy, carnation, double mixed. |  |
| Portulaca, fine mixed. |  |
|  |  |
| Pyrethrum aureum (Golden Feather). |  |
|  |  |
| Ricinus (Castor Bean), mixed .. ........... . . . . . . . . . . |  |
| Scabiosa (Mourning Bride), mixed... |  |
| Sensitive Plant, mimosa pudica..... ..................................................................... |  |
|  |  |
| Stock, double German, Ten Weeks, mixed ................ 2 |  |
| Sun Flower, double....................... |  |
| veet Peas, "Miss |  |
|  |  |
|  |  |
| " " Queen of the Isles, new.................. |  |
| " " Adonis, new |  |
| " " Boreatton, new... |  |
| " " mixed, per lb |  |
| Sweet William, double mixed................................. fine mixed. |  |
|  |  |
| Verbena, white, large; comes t |  |
| " mammo |  |
| " extra choice |  |
| fine mixed, all colors |  |
| Violet, sweet scented........................................... 2 . ${ }^{\text {a }}$ |  |
| Wall Flower, mixed double Zinnia, choice double mixed, per lb., \&4 00 . |  |
|  |  |

Wall Flower, mixed double.

# Bullss for Summer and Aluman Blooming. 

The following Bulbs will be sent by mail or express, charges prepaid, when ordered at single or dozen rates; at the 100 rate they will be sent by express or freight, the purchaser paying the charges. No less than six will be sent at the dozen rate; no less than fifty at the 100 rate. Orders, with money, should be forwarded as early as possible, and they will be filled in rotation. The tender Bulbs that are injured by frost will not be sent until such danger is over in the spring.

## DAHLIA.

The dahlia has always been a favorite for autumn flowering. The flowers are so symmetrical and perfect, and the range of colors so large and varied that they will always be popular where display is wanted. The roots are tender, and easily injured by frost. They should be set out three feet apart, after all danger of frost is over, and during winter placed in a cool cellar, and not allowed to freeze. The placed in a cool cellar, and not allowed to freeze. The tion of mixed dahlias, both double and single, is of the best, comprising all the positive colors with their most striking shades. Ready for shipment about April 1st.

## LARGE FLOWERING, OR SHOW DAHLIAS.

Fulgens Picta, scarlet, tipped white. EACH. Golden Bedder, deep orange, fine form .25 Miss Dodd, bright golden yellow. One of the best yellows. 25 Modoc, orange-carmine..
$V$ Vesta, pure white.
White Dove, pure white.

## POMPON, OR' BOUQUET DAHLIAS.

Guiding Star (or White Aster), pure white, very double. A prolific bloomer, fine for cut flowers. Single, extra choice mixed.................. 25 2 001200

## DIELYTRA-(Bleeding Heart).

Tuberous rooted plants, blooming in the spring, favorably known almost everywhere. They require only the ordinary culture of border plants. Roots planted in spring or autumn


Dielytra.
will flower freely. The roots should be divided every third year. The flowers are delicate pink, very graceful, produced continuously from May till July. Ready for shipment about April 1st.
Dielytra spectabilis....................each, 25; per doz., 250

## GLADIOLUS.

No flower has gained more rapidly in public favor; this could not well be otherwise, for in addition to the great intrinsic merit of the flower, it is easy of cultivation, and blooms the first season. The culture is very simple. They thrive in almost any good soil, except a stiff clay, require full sunlight, and are only liable to injury from rank manure. Plant the bulbs six to nine inches apart, the large ones four inches and the small ones two inches deep. Make an early planting of the smallest bulbs first as soon as the ground is sufficiently dry and warm, and continue to plant at intervals of two weeks during the spring and early summer. In this way a succession of bloom may be had from midsummer until frost. In autumn, before freezing, they should be dug and dried, the earth and old roots removed, and then stored in a cool, dry place, secure from frost until spring.


## NAMED GLADIOLUS.

The following named varieties are selected with special reference to beauty of flower, range of color and habit of plant. There is not one in the list that is not desirable, and every bulb has flowered the past season and is known to be true to color and description. Ready for shipment about April 1st.

Adanson, rose-tinged lilac, large blotch on white ground, tinged yellow, edged with carmine flushed lilac.

20
Angele, white, showy and effective.
Brenchleyensis, rich, dark, scarlet, very briliant.
Cameleon, large, slaty lilac.
$15 \quad 150$

Ceres, pure white, flamed lilac, desirable
10
20
$\begin{array}{rr}20 & 2 \\ 15 & 15\end{array}$
Crystal Palace, long spike of pure white flowers,
lower petals striped with purplish-violet..........
Eugene Scribe, tender rose, blazed with carminatered, beautiful.
$20 \quad 200$
$15 \quad 150$
Felicien David, cherry, light carmine feathered, white blotch.
Isaac Buchanan, one of the best yellow sorts yet introduced
$15 \quad 150$

John Bull, white, tinged with sulphur .................................... 10
LaCandeur, white, lightly striped with carmine-violet, perfection.
$25 \quad 250$
10100

Snow White, new, very fine.
Lamarck, cherry colored, slightly tinted wih orange, blazed with red, center very well lighted, very large, white stain.
$20 \quad 200$
Laura, orange-red, flamed carmine, pure white blotch
$10 \quad 100$
LePoussin, light red-white blotch, handsome......... 1
LeTitien, rosy scarlet, very brilliant..... ............
Lord Byron, brilliant scarlet, blotched and flaked pure white....................................................... blotch
$\begin{array}{lll}15 & 150\end{array}$
arie Dumortier, white, slightly streaked with rose, violet-purple blotch
$10 \quad 100$
artha Washington pure, light yellow, lower petais slightly tinged with rose; stately and beautiful..
Mons. Legouve, fiery red, white blotch, white line in each petal

Meyerbeer, brilliant scarlet, blazed with vermilion, very fine spike

EACH. DOZ.
Napoleon 1II, bright scarlet, the centre of the petals white striped, extra fine.
$20 \quad 200$
Norma, pure white, sometimes tinted with pale lilac. Ophir, dark yellow, purple blotch........................
Penelope, white, slightly tinged pink........................
Pepita, bright golden yellow, slightly striped carmine. The most free flowering yellow
Phoebus, brilliant red, with a large white stain.
Princess of Wales, white, flaked carmine.............
Robert Fortune, orange-lake, shading off to purple crimson, veined white.
Shakespeare, white or blush-white, blazed with rosy carmine, large, rose colored stain
Sultana, bright satin rose, flamed with carmine;
purple carmine blotch on white ground. Choice
VanDyck, crimson-amaranth, striped with white....

## MIXED GLADIOLUS.

These mixtures must not be compared nor confounded with the common mixed sorts, often the refuse of cheap, unsalable kinds. They are composed only of selected named varieties, representing over one hundred and fifty of the best sorts. We recommend this stock with perfect confidence.


Choice Mixed, all colors, including striped and blotched kinds.

75
350

## LILIUM.

The Lily has been, with eminent propriety, styled the "Queen of Flowers," and truly no flower conveys so adequate an idea of queenly beauty, majestic grandeur and faultless purity as the lily. Too much cannot be said in its

praise, and we are glad to notice its increasing popularity from year to year. Nearly every variety will withstand the severity of our winters, and many are among the most hardy of our garden flowers. Their culture is simple, and with a little care failure is impossible. The bulbs should be planted in spring as soon as the frost is out of the ground until first of May-the earlier the better. Select a well drained spot, dig the soil deep, and make it fine, enriching it abundantly with very rotten cow manure and adding a liberal mixture of sand. Set the bulbs from three to five inches deep, according to size. During the winter it is advisable to cover the surface of the bed with a thin layer of manure, which will not only afford a slight protection to the bulbs, but will materially enrich the soil. In spring the manure may be removed or dug in between the rows. Care should be taken that they have proper drainage, no water being allowed to stand around the roots. Once firmly established, they should not be disturbed oftener than once in five years. To produce extra fine specimens, plant the bulbs in small pots ( $4-5$ inches) early in spring, and raise them in the green-house or house.
Auratum, golden Japan lily, large bulbs............. 30 EACH. DOZ. Brownii, magnificent, large, white inside, purple outside
$30 \quad 300$
Lancifolium album, white Japan lily
" roseum, rose spotted Japan lily.
$\begin{array}{ll}75 & 500\end{array}$
" rubrum. white and red spotted $25 \quad 250$
Chalcerlonirum, brilliant scarlet, recurved blossoms. 1 in 0010 on Longiflorum, pure white, very fragrant.

Tigrinum (Tiger Lily), orange, spotted black bulbs, giving from twenty to thirty flowers. $\qquad$ Jacobean (Amaryllis Formossissima), deep scarlet. $25 \quad 250$


MADEIRA VINE-(Boussingaultia baselloides).
Tuberous rooted climber, with glossy, green leaves, and delightfully fragrant, white blossoms. Sometimes called "Mignonette Vine." It is of rapid growth, and from a few tubers vines will be produced sufficient to cover one side of a cottage in a single season. The tubers are tender and must be protected from frost during winter.

| EACH. | DOZ. |
| :---: | :---: |
|  | 10 | Madeira Vine, tubers. $\qquad$ ..................

## TRITOMA.

Sometimes called "Red Hot Poker." It is really a fine plant, pretty hardy, though requiring some protection through winter. The flowers are produced in large spikes of rich, orange-red tinted flower tubes. Plant two feet apart, and in November cut the plants back near the ground, and cover the bulbs with dry litter, which remove in the spring.



The flowers of this well known and popular plant are waxy white, double, and so fragrant as to perfume the whole atmosphere for some distance around. They are useful for forming button-hole bouquets, in large bouquets, or as single specimens. Each bulb flowers but once, but the smaller bulbs can be set out for future flowering when their growth is completed. A good way to grow tuberoses is to fill flveinch pots half full of cow manure, and the remainder with good, rich earth, mixed with sand. Plant the bulbs in this in April, water moderately, and hasten growth by putting in a warm, light place. When weather has become warm, plunge the pots in the earth out of doors. They will usually flower before cold weather in autumn; if they do not the pots can be brought in, and they will bloom in the house. The bulbs cannot be safely sent by mail before A pril 1st.

## ALL FLOWERING BULBS.

EACH. DOZ. 100.
$\begin{array}{ll}\text { Double White, tall. } \\ \text { Pearl, double dwarf white............................................................... } & 75 \\ 75 & 3 \\ 400\end{array}$

About september 1st next we will issue our Annual catalogue of CHOICE IOLTCH BELBS ANID SEEDS FOIR FALL PLANTING. It will be sent free to all customers without ordering it, and to others who apply for it.

## $\Rightarrow B O O K S=$

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Dadd's Am. Reformed Cattle Doctor, 8vo., new
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Herbert's Hints to Horse Keepers.
....... $1 \begin{gathered} \\ 50 \\ 50\end{gathered}$
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Keeping One Cow....
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Willard's Practical Dairy Husbandry ..... 300
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Silk Culture........................................................................ 30

THE LANGUAGE OF FLOWERS.-A neat little work of 120 pages, printed in fine style, on beautifully tinted paper, and contains several fine engravings. It gives the language and the poetry of flowers, and valuable suggestions in reference to floral decorations and floral conversation. It is so arranged that the botanical name of the flower may be referred to. Price, postpaid, paper, 25 cents.

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PRICES GREATLY REDUCEI, LOWER THAN EVER BEFORE。
This very complete line of Tools is popular, and quite deservedly so. They are reliable and accurate, and do nrot get out of order. Send for 1891 Illustrated, Descriptive Catalogues. Free.

## the "planet Jr." FARM and garden tools.

## THE "PLANET JR." <br> No. 2 S'sed Drill.

Sows all garden seeds accurately at any desired thickness or depth, opening, dropping covering, rolling down and marking the next row all at one passage in the most perfect and reliable manner. It holds $2 \frac{1}{2}$ quarts. It has no cams, levers, brushes, cogs, springs or shakers to get out of order; it is noiseless, automatic self-cleaning and accurate; it is remarkable for simplicity, strength and for ease and perfection of work in the field. No one having use for a Seed Drill can afford to buy any other; it is the best.
Price, bozed and delivered at Depot or Ezpress Office in Detroit, Mich., \$7.50.
Truckers, market gardeners, onion growers and all who raise vegetables in quantity should supply themselves also with the "Planet Jr." Double Wheel Hoe. (Described below.)
 Gonginined Diill, Wheed Hoe, Cullivator,
in beauty of design, perfection of finish. convenience and capacity for work; it is suitable for either the farm or the garden. As a Seed Drill it is the same as the No. 2 (see description above), except in size. It holds one quart. For after care of the crop it is supplied with a pair of rakes, a pair of long hoes. three reversible cultivator teeth and a large garden plow As a rake, it is invaluable in preparing the garden for planting, and also for delicate after cultivation of the crop and for covering seeds, etc., etc. As a Hoe, it works safely and closely both sides of the row at once when plants are small: between rows when plants are large. working all rows up to 16 inches wide at one passage. As a Plow, it opens furrows. covers them. hills. plows to and from. ete. As a Cultivator, it is admirably adapted to deep mellowing of the soil. All the blades are tempered and pelished steel.

The different tools in this combination comprise all that are necessary for the greatest variety of work usually needed in the hand cultivation of farm or garden crops, and are particularly useful for all sown by a seed drill.

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## THE "FIRE-FLY"

## WHEEL GARDEN PLOW.

Makes the care of a vegetable garden a pleasure, and 10,000 families who could not find time to keep a garden if attempting cultivation with the ordinary hand hoe can raise their own vegetables successfully with the "Fire-Fly." It takes the place of the horse and plow, or cultivator, requiring no wide headlands to turn on and is invaluable during all the gardening season.
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## The "Planet Jr." Double Whepl Hop, Sultivator, Rake and Plow.

This very popular tool has been completely remodeled; is greatly simplified, strengthened, improved, and merits the thorough admiration of every practical gardener. Each tool is sent out with a pair of rakes, a pair of hoes, four cultivator teeth and a pair of plows. The wheels are adjustable in height, and the arch is 14 inches high, thus enabling the operator to work both sides of the row at once, unless the plants grow over 18 inches high; then the wheels can be set to run close together and

the tool used between the rows. Leaf guards (detachable), go with each machine, to be used when plants extend into a wide row. This tool is light, very simple, made of the best material and highly finished, and nothing can exceed the perfection and variety of work it performs.

Price, boxed and delivered at Depot or Express Office in Detroit, Mich., \$6.50.


## Plain Double Wheel Hoé.

To meet a demand from some sections of the country, we offer the "Planet Jr." Double Wheel Hoe, just described, with only one pair of Hoes, and without leaf guards, under the name of "Planet Jr." Plain Double Wheel Hoe. This will make a very effective and cheap tool for parties who have limited work.

Price, boxed and delivered at Depot or Express Office in Detroit, Mich., \$4.00.
"PLANET JR."

Single Whepl Hop, Sultivator, Rake and plow.
In improving this tool care has been taken to combine extreme lightness, strength, variety of tools, and great adjustability. It has one pair of long hoes, a pair of Rakes, a pair of four-inch sweeps, one broad cultivating tooth, a steel garden plow, and one detachable leaf guard. All the blades are tempered and polished steel. This tool is pronounced by practical men as without an equal in beauty of design and finish, ease of operation, quality of work and variety of adjustment, and in this improved form is, unquestionably, the lightest running, the most convenient and practical single Wheel Hoe known.


The form of the blades has proved superior to all other shapes, insuring a forward slanting cut next to the plants and consequent close work without danger, and at the same time thorough cultivation of the soil. The cultivator teeth, in combination with the hoes, enable the operator to perform almost every variety of work, either in the field or garden. All rows, from six to eighteen inches apart, can be perfectly hoed at one passage. The frame allows every desirable adjustment, is quickly raised or lowered to regulate depth, and the wheel can be attached centrally or to either side of the machine, giving the operator the important advantage of hoeing both sides of the row at one passage when desired.

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The "Fire=Fly" Single Wheel Hoe, Cultivator and Plow.


This convenient tool has rapidly convinced practical gardeners of its high merits. It is also remodeled, and has the broadfaced wheel. It combines lightness and strength with the greatest adjustability, while its highly polished and tempered steel tools make gardening comparatively a pleasure. The tools are all made after the most perfect models, and are, first, " pair of admirable hoes which can be set to work to or from the row and to any desired depth. Next, a set of three reversible cultivator teeth to be used together or singly or in conjunction with the hoes. Third, a large, excellent garden plow. The whole tool is light and strong, attractive in appearance, and capable of standing hard usage for years, while the price is its final recommendation

Price, boxed and delivered at Depot or Bxpress Office in Detroit, Mich., $\$ 4.00$.

## THE "PLANET JR," GRASS EDGER.

A cheap, handy and effective frass Edger is a treasure, and bere it is: one with which you can in an hour edge beautifully the walks and the Hower and shrub beds of an ordinary half-acre lawn. Think of it; why, in the usual way it would take a day. This perfect little tool does either straight or curved work most accurately, edging at the desired angle and at the speed of a mile an hour. After all, the grand secret of attractiveness in out-of-door surroundings is extreme neatness; surrender that and the rest is in vain. The little "Planet Jr." Edger assists wonderfully in producing this indispensable effect. It will give more genuine pleasure and satisfaction for its moderate cost and the little time expended in its use, than the lawn mower. It should be a constant companion of the mower, and is invaluable in giving the last touch of neatness to the lawn, when the mower has done its best.

For heavy work the frame forms a pocket just the proper size to carry a brick, which gives the needed additional weight for effectual service.

Strawberry growers will find it also a rapid and perfect tool for cutting off surplus runners. For this work the hoe may be removed.

By removing the wheel, the hoe may be used alone with great satisfaction in the regetable garden, first cutting away from the crop, and then tion in the regetab


Price, boxed and delivered at Depot or Express Office in Detroit, Mich., \$3.50.
THE "PLANET JR." ALL STEEL Horse Hoe and Cultivator Combined, With Wheel.

## No tool which has ever been offered to the American public has so rapidly gained in faror as the "Planet Jr." All Striel

 Horse Hoe and Celtifator Combined. This is due to the fact that for the cultivation of all farm crops none equals it in cept the handles; has a patent lever expanding frame which can be closed to five inches or opened to twenty-four; has a side adjustment for the handles, by which they may be set lever wheel by which it may be changed to any depth in an instant, and is provided with such a variety of adjustable teeth as enables it to do all kinds of one-horse cultivation. The front two teeth are three inches wide. and of such a form ing weeds, and turn them upside down thus preparing for the easy working of the rear blades. The cultivator teeth can be set to work deep or shallow, as desired. The patent side steels are five inches wide, and by means of the patent side standards can be turned at any angle desired, or complete 1y reversed. This feature is found on the "Planet Jr." Horse Hoe alone. The rear steel is seven inches wide. and designed to fill in the fur rows made by the side steels, learing a finely shaped bed around the plants. The tool is also furnished with chree extra cultivator steels which can be placed on the three rear standards when desired. thus making it a plain cultivator. All the standards now used on the "Planet Jr." Horse Hoe are made from heavy sheet steel, struck up into the proper shape by special machinery. These Hollow. Steel Standards are far superior to anything ever before offered to the public, ant are a distinguishing feature of the improved "Planet Jr." Horse Hoe.

Price, including Wheel, delivered at Depot or Express Office in Detroit, Mich., \$8.50. Without Wheel, delivered at Depot or Express Office in Detroit, Mich., \$8.00.

## "GETM OF THE GARDEN"

## HAND WHEEL HOE AND CULTfyATOR.

This implement is offered to gardeners and others with the assurance that it is the most effective and convenient tool of the kind yet invented. Its working parts are: two Scuffle or Cutting Blades, one $4^{1 / 2}$ and one 9 inches wide; two Plows, right and left hand; five Stirring Teeth; all made of best steel.

The wheels and handles of the "GEM" are both adjustable in height. while the frame is soslottel that the hows, teeth and plows can be set in allowed by the teeth-five or less-which thoroughly a clean cut and is followed by the teeth-five or less-which thoroughly pulverize the soil. and drag out and expose to the sun the roots of the weeds cut by the hoe. In use. keep the tooth on the right, quite as far out as the end of the hoe. using it as a guard; being of such slender shape it will not throw dirt neminh to cover small plants. The homes of thin sterl, and presenting nearly a straight line to the work, avoid the "dodging" so common to tools of this kind.

Price, boxed and delivered at Depot or Express Office in Detroit, Mich., \$4.50. Double Wheel Attachment for "Gem of the Garden," consisting of One Pair of Wheels and One Pair of


## THE JNEED SLAYER.



 and one-halfinches under ground and $\tau$ inches wide $\$ 5.00$.

## MATTHEWS' GARDEN SEED DRILLS AND CULTIVATORS.



MATTHEWNS IMPROVED HAND CUYTIVATOR.
The Matthews Hand Cultivator has been greatly improved. It is now made with a larger wheel, and with a larger flange to it. It is also provided with a new set of teeth of an improved pattern, having Steel Blades of the best quality, and as now constructed is greatly superior to what it was before, and is perfectly adapted for use in any kind of soil.

It is thoroughly constructed throughout, very durable and easy to operate. A boy can do as much with it as six men with hoes. It spreads from six to fourteen inches, and will cut all the ground covered, even when spread to its greatest extent. The depth of the cultivation may be accurately gauged by raising or lowering the wheel, which is quickly done.

Price, boxed and delivered at Depot or Express Office in Detroit, Mich., \$4.00.

We can furnish for? the Matthews Improved Hand Cultivator, if desired, a pair of superior style Hoes with long Steel Blades, for use in exchange with the cultivator teeth, which are easily and quickly adjusted.

Price, per pair complete,


MATTHEWS' IMPROVED DRILL AND CULTIVATOR COMBINED. The Matthews Drill and Cultivator Combined has been greatly changed and improved. As a drill it now possesses all the features of the Matthews Garden Seed Drill of a smaller size. It has the same patent Indicator as that. The Cultivator attachment has also been greatly improved by providing it; with a new set of teeth of an improved pattern, with Steel Blades of the best quality, so that as a Cultivator it is now similar to the Mattthews Improved Hand Cultivator. This machine is very efficient, either as a drill or a cultivator, and will be found to be adapted to any kind of soil.

Price, boxed and delivered at Depot or Express Office in Detroit, Mich., \$10.00.

We can furnish for the Matthews Improved Drill and Cultivator Combined, if desired, a pair of superior style Hoes with long Steel Blades, for use in exchange with the cultivator teeth, which are easily and quickly adjusted.
Price per pair, complete, delivered at Depot or Express Office in Detroit, Mich., \$1.50.


ONION HOE.
To supply the demand for a tool exactly adapted
to onion culture, we have placed in stock the Crescent Scuffle Hoe, which we consider equal to anything we have ever seen for the purpose. The shape of the blade makes it work rapidly, easily and with great efficiency. It cuts both backward and forward, and leaves the surface of the soil smooth. It is also useful for cutting runners from strawberry vines and trimming lawn edges.

Price, Hoe (with handle), delivered at express office in Detroit, Mich., 75 cents, the purchaser paying express charges. Hoe (without handle), by mail, postage paid, 75 cents.

GUY'S GERMANTEANT FOOD.-For Flowers, Foliage Plants, Palms, Furms, Bult,s, otre, Compostel of nitrogen, ammonia and other chemicals essential to the growth of plants, producing a luxuriant growth and generous blousin. Plants fed with it are not often troubled with insects. Put up in wooden boxes, with full directions for use. Price, small size box, for testing, by mail, postpaid, 15 cents; larger sized box, containing five times the quantity, by mail, prepaid,
40 cents.
EXCELSIOR WEEDING HOOK.
-For weeding flower beds or vegetable gardens. It will work well among rows of seedlings, among ornamental plants, or in any place where freedom from weeds is desired. It removes the weeds with far greater rapidity than in the usual manner, without injury to the plants, and will pay for itself in one day's use.

Price, postpaid, 25 cents.


## Hasletine Hand Weeder and Scraper.

The latest and best hand weeder for use either in the flower or vegetable garden. For Onions and Strawberries it is simply indispensable. It is rapid, easy and thorough in its work. The blade is $7 / 8$ inch wide, $1 / 8$ inch thick, solid steel, oil tempered, and has five sharp edges. The cut is one-sixth full size.

Price, postpaid, 30 cents.

## THE CONCAVE AND CURVED SEED POTATO KNIFE.

Cut with a thin, straight knife a slice lengthways about $1 / 8$ inch thick from the center of a potato and hold it between you and the light. Feeders from the eyes will be shown as in Fig. 1. If these feeders are interfered with, either by cutting them off or shaving too close to them, the vitality will be greatly reduced.

It is evidently desirable, then, in cutting potatoes for seed, to conform to the structure of the tuber. With the common straight knife this is impossible.

The Concave and Curved Seed Potato Knife meets these requirements fully. It will cut two or three eyes in a piece better than any other knife, and will cut two single eyes without coming in contact with feeders, leaving the pieces in good shape to handle either by hand or with machine.

The great superiority of this knife lies, not so much in the saving of seed as in the increase in yield, for it is a recognized fact that potatoes cut to single eyes and planted in drills will produce the largest crop, and this is the only knife that will cut them to single eyes without injuring the vitality. Full directions for using accompany each knife.

Frice, postpaid, 35 cents.


## LADIES' FLORAL TOOLS.

These Floral Sets are so universally known that they need no description. They have steadily increased in public favor ever since their introduction several years ago, and have received the unqualified approval of all, we believe, of the leading florists of the country, and will be appreciated by every lady in the land who cultivates flowers.

Sets of four pieces, price per set, \$1.25, postpaid.

## "PERFECTION" REVOLVING LAWN AND GARDEN

 SPRINKLER AND FOUNTAINGuaranteed to do as much as any Sprinkler made.-The Perfection is warranted to accomplish as much as any Sprinkler in the market at the same pressure, and its superiority is shown by its simplicity, ease with which it can be cleared of any obstruction, effectiveness while working in a strong wind; also the circle watered can be reduced to any desired size, by turning the supply partly off. By its simple construction it can be used on hillside or terrace. In connection with a force pump, it can be used with good effect in green-houses, hot beds, etc. The bearings and working parts are made of brass, and it is complete in itself; it has only to be screwed to the hose and the pin stuck into the ground, to be used.

Price, postpaid, \$1.25.

## BRASS GREEN•HOUSE AND GARDEN SYRINGES

These Syringes are useful for all horticultural purposes, and are fitted with caps or roses for ejecting water in one stream or dispersing it in the most gentle manner, or with great force, when required. They are specially adapted for cleansing plants and flowers from those destructive insects which are so injurious to them, by means of whale oil soap, tohateo, juice, eto. They

B Length of Barrel, $131 / 2 \mathrm{in}$. diam., $1 \frac{3}{1} \frac{3}{6}$
Length of Barrel, 14 in ; diam.. 1? 2 .
are very strongly made from the best quality of brass, finely polished, elegant in appearance, not liable to dent or heorme in-
 No. A, one stream and one spray rose................. $\$ 2.25 \quad$ No. 0 , one spray rose, fast ends, large hules.

No. 00,
No. 1, ". detachable end.

## THE ITMPROMED HYDRONETTE PUTKP.

The improved Hydronette is an invaluable implement for sprinkling thowers, watering lawns, washine wimbows, carriac-as tte. and for extinglishing fires. It is made in a very durable mammer, and cammot easily set onit of wher. The pump lats a sprinkler and rubber hose attached, it will sprinkle your fowers. wash your windows, deviroy worms on grape vines, t.back



## Termis.

# Our Germs are Strietly Cash witḥ the Order. 

FREE OF POSTAGE OR EXPRESS CHARGES.-Where Packets, Ounces, Two Ounces, Quarter Pounds, or Pounds are ordered at list prices, they will be sent free by mail or express.

PINTS AND QUARTS.-Where Pints, Quarts and Four Quarts are ordered at list prices, fifteen cents per quart, ten cents per pint must be added for postage or express charges, and they will then be sent free.

PECK, BUSHEL AND BARREL LOTS. - Where Peck, Bushel or Barrel lots are ordered the freight or express charges must be paid by the party ordering.

In those cases where perishable or other goods are ordered to be sent by freight or express to such great distances that the cost of transportation will nearly or quite equal the value of the goods, we must decline to forward goods unless purchasers remit us, in addition to the price of goods, sufficient funds to prepay transportation charges. When this requirement is not complied with, we reserve the right of declining the order and returning money to the person ordering.

SEEDS BY MEASURE.-One-fourth bushel and over sold at bushel rates; Four Quarts and over, up to onequarter bushel sold at four-quart rates; less than Four Quarts sold at quart, or pint rates.

SEEDS BY WEIGHT.-Half Pound and over at pound rates; less than Half Pound lots are charged at ounce, two-ounce or quarter-pound rates.

BAGS.-To every order for one-quarter bushel and upwards, to the amount of two bushels, 20 cents must be added for a new bag in which to ship.

WE DO NOT SEND C. O. D., as the cost of collecting return charges is quite an unnecessary item of expense; and the prices being given, we can conceive of no necessity to warrant goods being so sent.

HOW TO SEND MONEY.-Remittances may be made at our risk by either of the following methods, viz: Postoffice Order, Draft on New York, Express Co's Money Order, or by Registered Letter.

The rates charged for Postoffice Orders and Express Money Orders are now so low that this is the very best way to remit where they can be obtained. We will bear the expense of sending money in either of these ways. Deduct the cost of the order from amount sent. We desire to call particular attention to the fact that Express Money Orders can be obtained at Als offices of the following Express Companies: American, United States, Wells, Fargo \& Co., and Northern Pacific. They are cheap and absolutely safe.

Postal Notes afford a cheap and convenient mode of remitting small sums, but without security, because they are payable to bearer. We cannot be responsible for money sent in this way.

When Money Orders cannot be obtained, letters containing money should always be registered. Money in ordinary letters is unsafe. If currency is sent by express, the charges should be prepaid, and if local checks are used, 25 cents must be added to cover the cost of collection.

SIGN YOUR NAME.-There is hardly a day that we do not receive letters containing money and orders, which we cannot fill, because the sender has failed to sign his name. Again, the $\mathbf{P} . \boldsymbol{O}$. address is frequently omitted, and the postmark, being blurred, we are unable to fill the order. no matter how much we desire to do so. Use our Order Sheet and Envelope, in all cases where you can, fill out the blank and sign your name, and you will have no cause to censure us.

CLUBS.-We offer the following liberal inducements to Clubs or those wishing to purchase seeds in packets. The seeds will be sent by mail, post-paid; but these low rates apply to seeds in packets only, and at catalogue prices, and not to seeds by weight or measure.



GUARANTEE.-Complaints made that seeds are not good, should quite as often be attributed to other causes as to the quality of the seeds. There are hundreds of contingencies continually arising to prevent the best seeds always giving satisfaction, such as sowing too deep, too shallow, in too wet or too dry soil; insects of all descriptions destroying the plants as soon as, or before they appear; wet weather, cold weather, frosts, chemical changes in the seeds induced by temperature, etc. For the above reasons, it is impracticable to guarantee seeds under all circumstances, and, while we exercise the greatest care to supply every article true to name, and of the very best quality, and believe our seeds to be the purest and best to be found, we wish it to be distinctly understood that we sell no seeds with any warranty, expressed or implied, and we will not be in any way responsible for the crop.
For Prices of

VEGETABLE SEEDS, see pages 91-96 inclusive.
FLOWER SEEDS, in Packets, see pages 53-81 inclusive.
FLOWER SEEDS, in Bulk, see page 81.
SUMMER BULBS, see pages 82-83.
BOOḰS, see page 84 .

# D. M. FERRY \& CO'S PRICE+LIST 1891 

## ARTICHOKE-See page 9.

Large Globe.
Pkt.
Pkt.
.10
Oz
30
20 O.
$1 / 4 \mathrm{Lb}$
100
Lb.
300
ASPARAGUS-See page 9.
Conover's Colossal
10
15
per 100 ,
BEANS, Dwarf, Bush, or Snap-See pages 9-11.
Challenge Dwarf Black Wax, Extra Early
Black Eyed Wax
D. M. Ferry \& Co's Detroit Wax, rust proof. .

Wardwell's Kidney $\mathbf{W}$ Wax, early and productive.
D. M. Ferry \& Co's Golden Wax-See Supplement.

Prolific German Wax, Black Seeded
German Wax, White Seeded
Speckled Wax-See Supplement.
scarlet Flageolet Wax
Violet Flageolet Wax
Crystal White Wax
Date Wax, very valuable for shipping
Extra Early Refugee-See Supplement
Early China Red Eye.
Dwarf Horticultural, very early.
Early Yellow Kidney Six Weeks.
Early Red Valentine, Improved, Round Pod Early Mohawk
Refugee, or Thousand to One.
Galega.
Royal Dwarf Kidney
Large White Marrow, or Mountain.
Early Marrow Pea, or Dwarf White Navy
Prolific Tree Bean.
Broad Windsor (English_Dwarf or Broad).
BEANS, Pole or Running-See pages 11-13.
White Crease Back, very early and productive.
Rhode Island Crease Back, splendid green shelled
London Horticultural.
Dutch Case Knife
Indian Chief, or Tall Black Wax.
Early Golden Cluster Wax-See Supplement
Southern Prolific, true
Kentucky Wonder-See Supplement.
Giant Red Wax
Red Speckled Cut Short, or Corn Hill
Early Jersey Lima, very early and desirable
Small White Lima, Carolina or Sieva.
Dreer's Inmproved Lima.
Challenger Lima, new, very large and productive.
Large White Lima
King of the Garden Lima
White Runner


ET-See pages 13-15.
Extra Early Egyptian Blood Turnip, true, finest stock
Early Eclipse, finest stock..
Early Blood Turnip, improved.
Dewing's Early Blood Turnip
Edmand's Early Blood Turnip-See Supplement
Bastian's Early Blood Turnip
Early Turnip Bassano, true.
D. M. Ferry \& Co's New Half Long Blood-See Supplement

Long Dark Blood, improved.
Swiss Chard, or Sea Kale Beet
French White Sugar, Green Top
French White Sugar, Red Top, best for cattle
Lane's Improved Imperial Sugar.
French Yellow Sugar
Vilmorin's Improved Imperial Sugar
Long Red Mangel Wurzel.
D. M. Ferry \& Co's Improved Mammoth Long Red Mangel iv urzel

Norbitan Giant Long Red Mangel Wurzel.
Yellow Globe Mangel Wurzel
Carter's Warden Prize Vellow Globe Hangel Wurzel
Yellow Leviathan Mangel Wurzel, new, very productive-See Supplement
Yellow Oroid Mangel Wurzel.
Golden Tankard Mangel Wirzel
Red Globe Manjrel Wurzel.


## CORN－Continued．

FIELD varieties．
Extra Early Adams，for table use South． Early Adams，or Burlington
Early Red Blazed．
Early Golden Dent，or Pride of the North．
Early Golden Lenawee Dent
Early Yellow Hathaway Dent．
Rice，for parching（bushel lots in ears）
Add ioc．per Pint，ise．per
Quart，for Postage，if Or－ dered sent by Mail．

| Pkt． | Pt． | Qt． | 4 Qt ． | Bu |
| :---: | :---: | :---: | :---: | :---: |
| 10 | 15 | 20 | cc | 359 |
| 10 | 15 | 20 | 60 | 350 |
| 10 | 1.5 | 20 | \％ | 2 5 |
| 10 | 15 | 20 | 50 | 250 |
| ． 10 | 15 | 20 | 60 | 300 |
| ． 19 | 15 | 23 | 5 | 350 |
| ．． 10 | 15 | 25 | ． | 150 |
|  |  |  | Lb． | Bu ． |
|  |  |  | 51 | 5171 |
|  |  |  | 50 | 400 |
| $\begin{gathered} \text { Pkt. } \\ 5 \end{gathered}$ | $\begin{aligned} & \mathrm{Oz} \\ & 10 \end{aligned}$ | $2 \mathrm{Oz}$ | $1 / 4 / 25 .$ | Lb 75 |
| ．． 5 | 10 | 15 | 20 | 50 |
| ． 10 | 35 | 60 | 100 | 350 |
| ． 10 | 25 | 40 | 75 | 250 |
| 5 | 10 | 15 | 20 | 70 |
| 5 | 10 | 15 | 20 | 65 |
| 5 | 10 | 15 | 20 | 65 |
| 5 | 10 | 15 | 20 | 70 |
| 5 | 10 | 15 | 20 | \％0 |
| 5 | 15 | 25 | 40 | 150 |
| 5 | 10 | 15 | 20 | 70 |
| 5 | 10 | 15 | 25 | 75 |
| 5 | 10 | 15 | 20 | 63 |
| 5 | 10 | 15 | 30 | 70 |
| 5 | 10 | 15 | 25 | 75 |
| 5 | 10 | 15 | 25 | 75 |
| 5 | 15 | 25 | 40 | 125 |
| 5 | 25 | 40 | 75 | 250 |
| ．． 5 | 45 | 85 | 150 | 450 |
| ． 5 | 60 | 100 | 175 | 600 |
|  | 15 | 25 | 40 | 150 |
|  | 20 | 35 | 60 | 175 |
| ．． 5 | 20 | 35 | 60 | 175 |
| ． | －． | －． | 15 | 35 |
| ． 10 | 25 | 40 | 75 | 250 |
| ． 10 | 50 | ．． | ．．． |  |

Japanese Nest Egg
10
Other varieties see Flower Seeds，pages 66－67．
HORSE RADISH，Small Roots－By mail，prepaid，each 10c．；per doz．40c．
－By freight or express，not prepaid，per $100, \$ 100$
KALE，or Borecole－See page 26 ．
Tall Green Curled Scotch．．．
Half Dwarf Moss Curled
Half Dwarf Moss Cu
German Dwarf Purple．
Extra Curled German Dwarf Green
German Dwarf Green，or German Greens
5
5
5

Early White Vienna，earliest for forcing．
Early Purple Vienna，earliest for forcing．
Large Green
20
90
15

| 8ニさ ${ }^{\text {a }}$ | $88^{1}$ | 8 |  | 8 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| －ran | G200－1 | $\square$ |  | $m$ | － |
| Kタ\％\％¢ | 889 | L2 |  | $8$ |  |
|  |  | $\stackrel{10}{\sim}$ |  | 18 |  |

． 5
LETTCCE－See pages 27－28．
Early Tennis Ball，true black seeded，for forcing．
Tilton＇s White Star－See Supplement
Black seeded simpson
Simpson＇s Early Curled
Hubbard＇s Market，early，large and valuable for forcing
Early Curled Silesia．
Grand Rapids－See Supplement
Ferry＇s Early Prize Head，the best for family use
Hanson．
Philadelphia Butter，or Early White Head．
Deacon，very compact and superb in quality－See Supplement
Frankfort Head．
Buttercup，very handsonae and of extra quality
Large Drumhead，or Victoria－Cabbage．
Brown Dutch，very hardy and of fine quality．
Early Boston Curled
Early White Self－Folding Cos，new－See Supplement．
MARTYNIA－See page 28.
Proboscidea，for pickling．
MELON，MLSK－See pages 28－29．
Jenny Lind．
Extra Early Citron
Baltimore，or Acme，the earliest first－class Melon
Skillman＇s Fine Netted．
Early White Japan．
Small Green Nutmeg
Improved Cantaloupe，green fleshed
Improved Large Green Nutmeg
Pine Apple
Bay View
Casaba，or Green Persian
Emerald Gem，the highest flavored red fleshed Melon
Hackensack


PEAS-See pages 34-36. Our list of Peas embraces every desirable kind yet offered, and our stocks can be entirely depended upon by the most critical gardin satisfaction


PEAS-Continued.
Large Black Eye Marrowfat
Dwarf Sugar, Edible Pods, gray seed
Tall Sugar, Edible Pods, gray seed
FIELD SORTS.
Common White.
Golden Vine, White.
Common Blue
Blue Prussian.
PEPPER-See pages 36-37.
Red Chili


Pkt.

Yellow Chili
Cardinal, novelty
Long Red Cayenne.
Large Squash.
Ruby King.
Large Bell, or Bull Nose
Sweet Mountain
Golden Dawn.
P1 10
$\ldots .10$
$\ldots .10$
about dered sent by Mail.

PUMPKIN-Sęe page 37.
Large Yellow.
(per bu., \$3.50)
Cushaw
(per bu., $\$ 5.00$ )
5
5
5
RADISH-See pages 37-39.
Non Plus Ultra, or Early Deep Scarlet Turnip, Forcing, the earliest, fine for forcing-See Supplement
Early Scarlet Turnip, White Tipped, Forcing-See Supplement
Early Scarlet Turnip, White Tipped
Early Round Deep Scarlet.
Early Scarlet Globe
Early White, Turnip Rooted
Early Deep Scarlet, Olive Shaped, Short Leaf
Early Scarlet, Olive Shaped.
French Breakfast
Early White, Olive Shaped.
Long Deep Scarlet, White Tip, new-See Supplement
Early Long Scarlet, Short Top, improved.
Wood's Early Frame.
Improved Chartier
Long White Vienna, also known as "Lady Finger"
Long Black Summer, new, extra fine-See Supplement
Long White Naples.
Large White Summer Turnip
White Strasburg
Early White Giant Stuttgart.
Golden Globe.
Gray Summer, Turnip Rooted winter varieties.
Scarlet China
California Mammoth White China.
Large White Spanish
Round Black Spanish
Long Black Spanish.
RAPE-See page 39.
Dwarf Essex, for sowing.
RHUBARB, or Pie Plant-See page 40.
Victoria.
Giant.
Linnæus
Rhubarb Roots.....................20 cents each...................................................... $\$ 1.50$ ).
SALSIFY, or Vegetable Oyster-See page 40.
Large White
Mammoth Sandwich Island............................................................................................................... 5
SPINAGE-See pages 40-41.
Savoy Leaved, earliest......................................................................................... . . . . . . . 5
Round Summer................

Long Standing
Long Standing Prickly, superior to the old Prickly-See Supplement
Prickly Winter
QUASH-See pages 41-42.
Early Yellow Bush Scallop.
. 5
Early White Bush Scallop
Mammoth Summer Crookneck, extra fine-See Supplement................................. . . . 10
Summer Crookneck.
Perfect Gem.
AUTUMN, OR WINTER SORTS.
Early Prolific Marrow, new.
Improved American Turban (Essex Hybrid)
Boston Marrow, Our own extra select stock, unsurpassed.
Hubbard. Our own extra select stock, unsurpassed.
Butman
Marblehead.
Winter Crookneck.
UGAR CANE-See page 42-43.
Early Amber.
(per bu., $\$ 4.00$ )
Early Orange.
( ${ }^{(1)}$ 4.00)
SUNFLOWER-See page 43.
Large Russian

Pt.
15

Bu .
250



$$
\begin{aligned}
& 250 \\
& 300
\end{aligned}
$$

1

## $\begin{array}{ll}1 & 75 \\ 175 \\ 1 & 75\end{array}$

100
125
35
35
35
40
40
35
65
65
00
65
65

80
80
75
75
80
80
80

40
40


FOREST TREE AND HEDGE SEEDS-See pages 49-50.


GRASS SEEDS-See pages 50-52.

| Trmothy ........ |  |  |  | of 14 lbs ., 250 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Orchard Grass. | " | 45c.; | ، |  |  |  |
| Red Top. | " | $35 \mathrm{c} . ;$ | " | 14 |  | $1 』$ |
| " Fancy (cleaned from chaff). | 6 | 40c.; | 6 |  | " |  |
| Fowl Meadow, or False Red Top. | " | 75 c .; | 6 | 12 | " | 400 |
| Blue Grass, Kentucky, fancy clean. . | ، | 60 c .; | " | 14 | '6 | 400 |
| Johnson Gras | 6 | 45c. ; | " | 25 | " | 400 |
| Perennial Rye Grass | " | 2ัe.; | * | 20 | '6 | 200 |
| Meadow Fescue, or English Blue Grass. | ، | 40c.; | " | 24 | 6 | 300 |
| Wood Meadow Grass. | " | 60c.; | 6 | 14 | ' | 500 |
| Swert Vernal Grass. | " | 35 c .; | * | 11 | " | 250 |
| Hungarian Grass. | " | 25 c .; | 6 | 48 | " | 125 |
| Millet, common.. | " | 25c.; | 6 | 50 | " | 125 |
| " German, or Golden | " | 25. ; | " 6 | 50 | " | 150 |
| Fine Mixed Lawn... | " | 40c.; | 6 | @ | * | 400 |
| Extra Fine Mixed, Central Park Mixtur | 6 | 50c.; | " | 5 | " | 500 |

MISCELLANEOUS FARM SEEDS-See page 52.

(HALLENGE

- D Ware Bact Wax


THE EARLIEST WAX BEAN IN

SEE SUPPLEMENT (Ultivation.


[^0]:    with large, light green leaves. Pods very long and large,
    being longer than those of the Scarlet Flageolet Wax, also more twisted of wax beans. The pods are a little later in coming to use than the Scarlet, but are distinctly larger. This is also sold as Perfection Wax, and by other names.

