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Vaughan's Seed Store

1883

CHICAGO

88 STATE ST.
146-B W. WASHINGTON ST.

WINING-
EMPLOYMENT FOR WHICH-
MAN IS TOO HIGH OR TOO LOW."

LILIUM
AURATUM

offered on the third cover page, is the most complete collection for the home garden ever offered for the money, and we want every reader of this 1889 Catalogue [even if he has no use for other articles from our book], to at least enclose a \$1.00 bill for this vegetable seed package and if he has no garden of his own, we will mail them to his best friend and book his name in our names list for our Annual of 1890.

"AND LET IT APPEAR THAT HE DOTH NOT CHANGE HIS COUNTRY MANNERS FOR THOSE OF FOREIGN PARTS; BUT ONLY PRICK IN SOME FLOWERS THAT HE HATH LEARNED ABROAD INTO THE CUSTOMS OF HIS OWN COUNTRY."

BACON'S ESSAY ON TRAVEL.

RIGHTED 1869, BY J. C. VAUGHAN, CHICAGO

TO BUYERS OF SEEDS AND FLOWERS; WHY WE ASK YOUR ORDERS AND HOW TO MAKE THEM.

OFFICE AND WAREHOUSE,
146 & 148 W. Washington St.

CITY STORE, NO. 88 STATE ST.

It is said that the great secret of the success of some politicians consists in making so many false charges that their opponents who think it necessary to disprove them, find no time left to present the opposite side of the issues. Now in the seed business we think it wise not to mind what the opposition may be saying, but to use the very short time we can claim from our busy readers in telling why "**VAUGHAN'S SEED from CHICAGO**" can be sent quickly to every post office in the Union, will grow when they get there, and will please in quality and excel in crop.

OUR FACILITIES.

We have again increased our Warehouse room at 146 & 148 West Washington St., where we now occupy the basement, first and second floors, each 40 x 185 feet and in addition to these, have two storage cellars for Potatoes and Bulbs. These large storage, packing and shipping floors are equal to any in our line of business in the East or West. Our City Store is in the center of the retail business of the City, at 88 State St., and will be found most convenient to all who make their purchases in person at our counters. We are in the Wholesale Center of Chicago, are equipped with all business facilities for quick, correct and honorable service and believe we can handle your business as satisfactorily as any seedsman in the country. If you can buy all the Merchandise of the World as cheaply at Chicago as elsewhere, why not **SEEDS**?

PREPAID.

At the urgent request of thousands of seed buyers, Congress has reduced the postage on seeds and plants to 8 cents per pound. While this rate remains, we propose to send **all seeds and plants Prepaid** to our Customers, except where offered in large quantities and especially stated that the same go at purchaser's expense. This change will add much to the convenience of our patrons who buy by Mail.

OUR CENTRAL LATITUDE

Gives us a climate and season for varieties suitable to the **GREAT CENTRAL AGRICULTURAL BELT** of the Northern States, avoiding the small and inferior Vegetables, Flowers and Grains from the extreme North as well as the late large growing and non-maturing varieties of the South. The hackneyed cry of "Northern Grown" varieties **MAY** mean something, but oftener nothing really worthy; (for why plant a sixty-day small and inferior kind when you have 100 days in which you can mature a larger and better one?) Those who tell you that the largest Southern products can be safely grown anywhere are equally as misleading. "There is always safety in the middle ground."

MOST OF OUR STOCK

Is grown for us by experienced growers and from Seeds which we know to be true and reliable. Such varieties as we import are also from growers of stock we have tried and proven. All are tested under conditions which will prove their germinating power when planted in open ground.

TRUE DESCRIPTIONS.

We have made most careful comparisons through our entire vegetable list both in our own trials and careful observation of many European testing grounds, and our descriptions of all varieties here offered will be found as true as we can make them, and what is of great value to the buyer, the merits of one kind are compared to those of other similar sorts enabling the purchaser to arrive at some intelligent opinion of their real merits instead of the conclusion forced on the readers of many Catalogues that each variety is the best.

OUR VEGETABLE LIST.

While it is one of the most complete in the country, it has been selected and made up with especial reference to our thousands of **MARKET GARDENER** customers, who demand not only the handsomest kinds grown but the earliest, best and most productive as well; and we urge these who have never given us an order to make a trial this season of some of our specialties and see if the results do not justify the claims we make. Even though you may be satisfied with seeds bought elsewhere, we believe our special strains of the **NEWER VEGETABLES** will make it profitable for you to send a trial order here. Our Seeds, Plants, Bulbs and Tools make up the most complete outfit in the United States. Notice our Department of **PLANTS**, greatly enlarged.

FREE NOVELTIES.

With nearly every order, besides our Special Premium (see order sheet) we send **EXTRA** Seeds of **NOVELTIES** for trial; we aim to be in this respect and especially in the size of our Seed Packets more liberal than any other Seedsman. Many new customers have been surprised at the quantity we put in our packets.

OUR PRICES

Will be found as low as good seeds can be grown and sold, and will, we are sure, compare favorably with those of any **RELIABLE SEEDSMAN**. We think Seeds that are offered as "given away"—"Annual free distribution," etc., can be of little real worth.

ALL GARDEN TOOLS AND SUPPLIES.

We also supply all demands in our line of work, **Grains, Garden Tools and Fertilizers**, thus enabling customers to combine their orders and reduce freight or express charges to the lowest limit.

HOW TO ORDER, PLEASE READ CAREFULLY.

We do not send **C. O. D. Seeds, Potatoes or Tools**. Write your Name, Post Office, State, and your Express Office plainly on every order. Give plain shipping directions; where none are given we use our best judgment but it must be at your expense and risk.

WARRANTY.

We test all Seeds before sending them out, but in case they fail to grow when tested by purchaser, we will replace them or give value in others, but can in no manner warrant the crop or be responsible for other failures. We will not be responsible for failure of Grass seeds, in any manner.

FAIR PRICES.

We endeavor to meet the competition of **EQUALLY GOOD** Seeds. If you are offered lower rates than these and will send them to us, stating by whom offered, we will try to meet same. We will be responsible for no loss beyond the value of the Seed. Notice our great premium offers.

GOOD ORDER.

If Seeds are not received, or are received in bad order, we will send again as soon as notified. Claims should be made **IMMEDIATELY**.

HOW TO PAY.

Send cash with order (as we do not open book accounts for small amounts, and can only send to value of money received), by New York or Chicago Draft, Registered Letter, Money Order, Express Order, or Cash by Express, in any of these ways at our risk. Postage stamps are taken as cash. Registered Letters are generally very safe, and you can send that way from any postoffice and get our receipt by return mail, by which you know it has reached us.

COST OF REMITTING.

Our customers may select additional Seeds Free, with every order of \$1.00 or more, to the amount of the cost of the money order, registered letter, or other remittance.

VERY

IMPORTANT.

- We aim to fill your orders immediately, and you can greatly aid us in making them out on our Order Sheet, as follows:
1. Place the quantity wanted before each article.
 2. Use one line for each kind ordered.
 3. As nearly as possible make out your list in the same order in which the Seeds are Catalogued, beginning at the front.

ADDRESS:

VAUGHAN'S SEED STORE, →

OFFICE AND
WAREHOUSE: } 146 & 148 West Washington Street,

CITY
STORE: } 88 State Street, **CHICAGO.**

Address Telegrams to Warehouse. **LETTERS TO LOCK BOX 688.** Visitors in the City can be supplied at any of our Stores.

If you forget our Street and Number, address simply

"**VAUGHAN'S SEED STORE, CHICAGO,**" though it be mailed from any part of the World, it will reach us.

NOVELTIES AND SPECIALTIES for 1889

NEW BUSH LIMA BEAN.

HENDERSON'S NEW BUSH LIMA BEAN.

Copyright, 1888,

THIS is undoubtedly the most valuable vegetable novelty that has been introduced in many years. Thousands have been deterred from cultivating the most delicious of vegetables—the Lima Bean—by the great trouble and expense of procuring the unsightly poles on which to grow them. This is now a thing of the past, as **THE NEW BUSH LIMA** grows without the aid of stakes or poles, in compact bush form, from fifteen to eighteen inches high, and produces enormous crops of delicious Lima Beans, which can be as easily gathered as the common garden bush beans. **THE NEW BUSH LIMA** is at least **TWO WEEKS EARLIER** than any of the climbing Limas. This fact alone would stamp it as the most valued novelty of recent years, but when in addition to this we realize that it is a true bush bean, requiring no supports, some idea of its great value can be realized. **THE NEW BUSH LIMA** produces a continuous crop from the time it comes into bearing [it is fit for the table in the latitude of New York by the middle of July] until frost, and being enormously productive, a very small patch will keep a family supplied with this splendid vegetable throughout the season. Twelve packets will plant five rows, each fifty feet long, which is ample for an ordinary family. The beans are of the size of the Sieva or Southern Lima, and as before stated, of delicious quality. The stock of **THE NEW BUSH LIMA** being quite limited, it is offered in packets only, sealed with the trade mark of the introducers. Cultural directions are printed on each packet.

Price, per pkt., 25c.; 5 pkts., \$1.00; 12 pkts., \$2.00.

Oswego, Ill., June 13th, '88.—All the seeds we have received from your house grow. I have some fine vegetables and am well pleased in dealing with you. J. T. Wormley.

GIANT GOLDEN HEART CELERY.

This variety has been produced by careful selection and high culture from the Dwarf Golden Heart, by one of the best celery growers near Chicago, where as is well known, a very large amount of celery is grown for market. In quality, appearance and size this variety leaves nothing to be desired. We recommend it as the Best Celery for the Market Gardener now before the public, while its fine flavor and rich color make it most desirable for private use. We have very high testimonials from Kalamazoo growers on our stock of this. Last Spring we had but a small crop to offer, but this Summer we have had a better crop and can now quote new seed of this best of all Market Celeries at the following prices:

Per pkt., 10c.; 1/2 oz., 50c.; oz., \$1.00; 1/4 lb., \$2.50.

Messrs. John Newhall & Son, of Kalamazoo, Mich., large growers of Celery, found our "Giant Golden Heart" the best of all varieties planted and ordered from us for 1889 planting, two lbs. of the same seed as used in 1888.

GARDEN TOOLS.
Do not forget that we carry the most complete stock in the U. S. We will make the closest prices.

DRACÆNA LEAVED BEET.

GIANT GOLDEN HEART CELERY.

very solid; when tried in this country this season it was awarded a prize by the Mass. Horticultural Society, (but one variety ranked ahead of it, and that selection is not yet offered for sale). A leading gardener at Kalamazoo, Mich., reports his trial of it very satisfactory. We have imported a stock of it and can offer it as follows:

Price, pkt., 10c.; oz., 50c.; 1/4 lb., \$1.50; lb., \$5.00.

EMPEROR WILLIAM BUSH BEAN.

A vigorous growing, dwarf variety which produces an abundance of remarkably long, flat pods of rich and delicate flavor. The seeds are white and flat, resembling those of the Dutch Caseknife. It ripens with the earliest and will give satisfaction.

Per pkt., 10c.; pint, 30c.; qt., 55c.; peck, \$3.00.

DRACÆNA LEAVED BEET.

Both Useful and Ornamental.

A very showy and effective foliage plant, with very dark, almost black, glossy leaves, resembling those of the Dracaena. They are equally valuable for borders and clumps.

Per pkt., 10c.; 3 for 25c.

MAMMOTH CHILIAN BEET.

Another very showy kind of the Beet family which may be classed among the finest foliage plants in existence. The leaves are over three feet in length and one foot wide and are of the most striking coloring, which is sometimes a reddish-green, or a deep blood-red, or an orange-scarlet with a metallic lustre not equaled in any other plant. The midrib of the leaves is very strong and also of a bright scarlet, violet or crimson color. As solitary plants or still more in groups or with other contrasting plants they are most charming and effective. (For cut see order sheet.)

Per pkt., 10c.; 3 for 25c.

New Solid Ivory Celery.

A white celery is one which appeals to every cultivator, simplifying as it does much of the labor involved in earthing up the green varieties so necessary to thorough bleaching. While visiting the seed farm of a celebrated London house, our attention was called to this new variety; its growth is very dwarf and compact, and its color white throughout, it is of good flavor and

SOLID IVORY CELERY.

Vaughan's Seed Store.

NOVELTIES AND SPECIALTIES for 1889

NEW SWEET CORN, BURBANK'S EARLY MAINE.

AS early as Cory, larger, and pure white. This candidate which appeals to the shrewd market gardener as well as every owner of a home garden plot, comes from the State whose name it bears and whose latitude is an indication of earliness in all vegetables. It has a pure white cob with a rich cream white kernel, sweet and juicy. Shows none of the red shade like Cory or Marblehead when cooked for the table. A fine ear, of good size, (see photo,) stalk medium, and on good soil often bears two ears. It is the result of six years careful selection. Experienced customers in New York and Michigan who tried it the past season find it the largest white first early sweet corn they have grown. A celebrated seed grower writes: "The Early Maine is much earlier than the Cory and has a much handsomer ear and more compact on the cob."

Price, per pkt., 15c.; pint, 25c.; qt., 45c.; not prepaid, qt., 30c.; peck, \$1.50.

NEW SWEET CORN "GOLD COIN."

LIVINGSTON'S SONS, the famous tomato growers, say: "The New Livingston's 'GOLD COIN' SWEET CORN is remarkably distinct and handsome in appearance, and is without doubt the most valuable variety ever introduced. Its enormous productiveness is enough to place it in advance of any sort now grown—always

yielding two, and frequently three ears to the stalk. In quality it is most delicious and has no equal, being of a rich golden yellow and so showy as to attract much attention wherever seen. It has for the past three years been compared in all points with Stowell's Evergreen and in SWEETNESS and DELICACY of flavor it surpasses that old favorite. It is about ten days earlier, and in size equal or larger. The cob is snowy white, compactly covered with large, deep grains. Perhaps its most valuable characteristic lies in the fact that it is EVERGREEN to an unprecedented degree. Last season the great bulk of the crop could have been gathered any time during a period of four weeks and have been found in perfect condition for table use. It is sure to be of great value to gardeners and canners. We commend it to all lovers

of Sweet Corn, as a variety which will please the most critical."

Price, per pkt., 20c.; 3 for 50c.; 7 for \$1.00; 12 for \$1.75.

RUBY SUGAR CORN.

THIS is a real novelty in the way of sweet corn, and differs from all other varieties. The stalks and husks being of a deep ruby-red color, while the kernels are of snowy whiteness and look like rows of pearls in contrast with the deep red color of the husks, the effect of which is very striking and beautiful. Stalks grow from six to seven feet high; ears eight to ten inches long, from twelve to eighteen rowed; kernels pure white and very tender, sweet and well flavored, not excelled by any other variety; hardy and productive and remains a long period in condition for use. It is intermediate in its season, and if planted at the same time as the Crosby, or other equally early kinds will keep the table supplied till October. It originated with C. N. Brackett of Newton, Mass., in 1885, and was exhibited by him at the exhibitions of the Massachusetts Horticultural Society in 1886 and 1887, where it attracted much attention on account of its novelty and beauty. It must be seen to be appreciated.

For sale in $\frac{1}{4}$ pint packets only at 15c. per packet.

PEDIGREE SWEET CORN.

THE originator says: "Northern Pedigree Sweet Corn has been grown for twenty-five years in our family, and during that time the earliest and best formed ears have been saved for stock. This has resulted in securing the sweetest and most perfectly formed ears of any early sugar corn known. Tested side by side at different times with all the early varieties, with the single exception of the Cory it has always proven to be from six to ten days, earlier than the earliest. This season it was fit for the table but two or three days before the Cory, but in ALL those qualities that go to make up a first-class sweet corn it was more than 'head and shoulders' above the Cory. All who tested their comparative merits decided that the Northern Pedigree was the sweetest, richest, most tender, earliest, and had by far the most compact and best formed ears." We regret that our crop of this is very limited this season and we can only offer it as follows: [For a desirable very early variety try the Burbank.]

Price, per pkt., 10c.; pint, 20c.; quart, 35c.; peck, \$1.75.

RUBY SUGAR CORN.

PERRY'S HYBRID SWEET CORN.

FOR this new hybrid, which we introduced in 1886, comes the strongest praise from all quarters. In one phrase which we used last year, the situation is summed up, "THERE IS NO BETTER SECOND EARLY." Perry's Hybrid, while NEARLY AS EARLY AS MINNESOTA, makes a much larger ear. Several customers insist that it followed the Cory within five days while it is white, sweet, tender and large. As the type is improving when carefully selected by the originator, we have each season contracted for our seed with Mr. A. D. Perry, the originator, and the corn we offer for 1889 has been grown and personally selected by him; therefore our customers may depend on securing from us the MOST PERFECT TYPE OF THIS VALUABLE VARIETY. Headquarters Seed, per pkt., 10c.; pint, 20c.; qt., 35c.; not prepaid, peck, \$1.15; bush., \$4.00.

Richmond, Ind., Dec. '88. -- Your Chicago Market Musk Melon was A No. 1; so was your Giant Golden Heart Celery. Geo. H. Fetta.

NOVELTIES AND SPECIALTIES for 1889

Vaughan's Seed Store.

VAUGHAN'S

MARKET GARDENERS' CABBAGE.

TWO years ago we secured from a customer near one of the largest cities in the country this strain of market Cabbage, which has been grown and selected with great care for a number of years by an experienced market gardener. He has been able to sell such quantities of seed as he could supply to his neighbors, at \$12.00 to \$15.00 per pound, and this in competition with all the standard varieties which could be had for one-fourth of that sum. If planted early it is ready for use nearly as quick as Henderson's Summer, while with late planting it may be used for Fall or Winter, being of good size and very solid. Reports from many of our customers and careful trials of our own for the past two years justify us in saying: **It is undoubtedly one of the best varieties for general crop and all purposes that can be found** and we again urge its great merit for the purposes stated above. Our illustration was photographed from a specimen from our trial grounds this season.

Price, per pkt., 15c.; $\frac{1}{4}$ oz., 40c.; oz., \$1.25;
 $\frac{1}{4}$ lb., \$4.00.

Boscobel, Wis., Oct. 27, '88.--Your Market Gardeners' Cabbage and Intermediate Carrot received first premium in competition with several other varieties. Your Extra Early Erfurt Cauliflower is the only kind I ever had perfect success in raising. Chas. G. Menckhausen.

Vaughan's Market Gardeners' Cabbage proved with me to be much more solid than "All Seasons," just as early, heads more evenly and less waste.

Robert Purvis, Gardener, Rose Hill, near Chicago.

CASSEL ♦ CABBAGE.

A favorite German variety, in season like Winnigstadt, in form sugar loaf, very solid and excellent for the family garden. We secured a supply this season from a German seed grower who values it highly.

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

❁ CHICAGO PICKLE CUCUMBER. ❁

FOR several years Chicago has led in the manufacture of pickles, consequently market gardeners have sought to breed a prolific strain especially adapted to this purpose. Mr. Westerfield, who has been interested in the business since its beginning, thinks he has in this one secured a variety that combines all the qualities sought, and as proof refers to every large pickle factory at or near Chicago, all of whom prefer it to any variety known to the trade, even at double the price. It is a profitable kind for this purpose. We sent out the first of this seed to the public, and still have our stock direct from the originator, who supplies no other seed house. We are supplying the largest dealers in the U. S. with our stock of this pickle and we may fairly claim that it now stands at THE HEAD OF THE LIST. The Chicago Pickle Cucumber, introduced by us, has now taken first rank as a pickle cucumber among the leading seedsmen of the U. S.

SELECTED SEED: Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.00.

ORDINARY SEED: Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Nashua, Iowa, Nov. '88.--Chicago Pickle Cucumbers are excellent.

J. M. Heald.

Roodhouse, Ill., Nov., '88.--Your Cucumber and Radish Seeds have given excellent satisfaction.

A. Orr.

Chrisman, Ill.--I consider your Chicago Pickling Cucumber, Improved Christiana Musk Melon and Improved Chartier Radish all first class.

C. Staniford.

NEW SAVOY CABBAGE--MARVIN'S.

This very distinct and uniform Savoy originated in a Long Island family who have followed the trucking business for a century. The Cabbage is not only very large and solid but very curly, and will give 90 to 95 per cent. of good heads in every field. This has given excellent satisfaction and we offer it as a splendid savoy for the home garden.

Per pkt., 15c.; oz., \$1.00.

CHICAGO PICKLE CUCUMBER.

○ CABBAGE--LUXEMBURG. ○

Our market gardeners have for several years grown this variety, which was brought into the country by a German gardener who knew no name for it. It proved so valuable that the seed has been sold frequently at \$1.00 per ounce, and sometimes higher. It makes a very hard head of good size, and is remarkable for its keeping qualities when buried over winter. We have had a small lot of the seed grown, and can offer as follows: Pkt., 15c.; 5 for 50c.

NOVELTIES AND SPECIALTIES for 1889

CHICAGO * MARKET * MUSK * MELON.

THIS deservedly popular variety, which we first sent out seven years ago, has been steadily growing in favor every year since, and holds its own against all melons in our market, with the possible exception of the Osage; it is a great favorite with all who prefer a green fleshed variety. It has been carefully selected and improved by Mr. A. Colvin, one of the most successful market melon growers near Chicago. Every year the melons for seed have been most carefully selected, for the following points: Earliness of maturity, large and uniform size, thickly netted skin, small seed cavity, deep green flesh, juicy and delicious flavor and freedom from rot. The result of this careful selection is evinced in the practical monopoly which this variety has maintained in the Chicago market for a number of years. **WE CONSIDER IT THE BEST NUTMEG** and recommend it to all lovers of this delicious fruit. Our selected seed has been taken from earliest Melons, worth \$3.00 per dozen, and the supply is limited.

"SELECTED SEED," (from originator, selected as above.)

Per pkt., 10c.; oz., 50c.; 1-4 lb., \$1.40; 1b., \$5.00.

"ORDINARY SEED," saved by a very careful grower.

Pkt., 5c.; oz., 15c.; 1-4 lb., 40c.; 1b., \$1.25.

JUMBO WATER MELON.

Novelty of last year. The shape is round, color green with faint lighter stripes, deep red meat, surpassing all other varieties as much in flavor as in size, and as a market melon, sells more rapidly and for higher prices. They grow to weigh eighty pounds—from forty to sixty pounds is common. Wagon loads have averaged fifty-five pounds each. It is rather late and we do not consider it so desirable as other earlier sorts to plant north of the latitude of Chicago, but it is all right south.

Pkt., 5c.; oz., 20c.; ¼ lb., 70c.; 1b., \$2.50.

CHAMPION MARKET MUSK MELON.

It is almost a perfect globe in shape and densely netted, the flesh thick, light green in color and of very rich, sweet flavor, fulfilling well the promise of quality indicated by the deep ribs and handsome outer appearance. It is nearly as early as the Netted Gem, which it resembles in shape and appearance and far surpasses it in size, the melons being fully **THREE TIMES LARGER**, of uniform size, ranging from 4 to 5½ lbs. weight. Its excellent shipping qualities, attractive appearance and good size combine to render it a very valuable market sort wherever a green fleshed variety is popular. We have had most satisfactory reports from the Champion Market, and think very highly of it. The appearance is not entirely uniform, some being more oblong than others, but the

CHICAGO MARKET, FROM A PHOTOGRAPH.

KENTUCKY WONDER

WATER MELON.

Kentucky Wonder three years ago won First Prize over the Ironclad, Cuban Queen, and Kolb's Gem, for **FINEST FLAVOR AND BEST QUALITY**. In 1886 several hundred free packets were sent to melon growers throughout the

country for trial, and reports received well justified the introduction of this grand new melon to the public. Oblong in shape, skin dark green, marbled in stripes of light green, flesh a beautiful scarlet color, crisp, and not tough, rich and sugary flavor, always firm, very solid and never mealy; seed red. Attains an average weight of 40 to 60 pounds. Not a MAMMOTH VARIETY, but a real good old-fashioned Kentucky Melon, that has no equal for quality. The best all-round melon for home and market yet introduced.

Price, per pkt., 15c.; 2 for 25c.; 5 for 50c.

Aurora, Ill., Oct. 24, '88.—The Chicago Market Musk Melons are just superb. The finest I ever raised, also the largest. I am going to plant an acre of them next year. Turner's Hybrid Tomato surpasses any I ever grew. My neighbors all complained of their tomatoes rotting badly, but Turner's was sound as a bullet. Without doubt they are the Tomato. My stock was very large, of good size and shape. All the seeds I bought of you last spring were just as you represented them.

L. E. Dean.

Rapids City, Ill.—I recommend your seeds to all my acquaintances, for they give perfect satisfaction.

Mrs. J. Hauck.

CHAMPION MARKET MUSK MELON.

Don't Fail to Read our Third Cover Page.

NOVELTIES AND SPECIALTIES for 1889

LETTUCE, CHARTIER PINK.

LETTUCE, CHARTIER PINK.

THIS very handsome sort has been known to a few of the Pittsburgh, Pa. gardeners for some years and they have kept it very carefully among themselves, so what small amounts of the seeds as were offered in the market sold as high as \$1.00 per ounce. A veteran seedsman who has grown it this year says it one of the most distinct and striking varieties in cultivation. Its leaves are curled much like the Simpson, but it attracts most attention from its beautiful pinkish color, while its table quality is first-class. Pkt., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.50.

LETTUCE, RUDOLPH'S FAVORITE.

BRIGHT greenish yellow, well curled, very tender and delicate leaves; makes a firm handsome head of good size. It is good for forcing and for the open ground. We saw it in a field of twenty kinds on a German seed farm this season, and it was slowest to run to seed and of finest quality. Engraving is from photograph made from a head selected at that time. Pkt., 10c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.00.

LETTUCE, RUDOLPH'S FAVORITE.

*** CORAL GEM BOUQUET PEPPER. ***

THIS new pepper is the finest of the small sized varieties. Its beautiful pods of shining red color are so thickly set as to give it the appearance of a bouquet of corals. As a pot plant, it has proven a most rapid selling article, for besides its great beauty it serves the housekeeper in a most convenient way when pods are wanted for seasoning. In the open ground the plants grow to the height of from 24 to 30 inches, so densely set with pods as to bend the branches down. There are so many desirable qualities combined in this, it will undoubtedly become the most popular for general use as well as profitable for the manufacture of pepper sauce. Each packet contains two pods with seed. Per pkt., 10c.; 3 for 25c.

CORAL GEM

BOUQUET PEPPER

*** ASPARAGUS, GIANT EARLY ARGENTEUIL. ***

PARIS is renowned for her flower and vegetable gardens, from her Mushroom Caves beneath the great city to the famous "Halles Centrales," her great market place. Every variety of vegetable has through the strong competition, been brought to its highest perfection. This is true of the finest varieties as well as the most common, and in Asparagus we find in the Giant Argenteuil the largest, earliest and most distinct of all the Asparagus sorts. We have imported direct from a specialist in this line who supplies the largest Paris hotels, a stock of these roots and recommend our friends to give it a trial, believing in advance of any sort we have. Price, strong roots, 5 for 50c.; 12 for \$1.00; 25 for \$1.75.

For other Asparagus Plants, see page 17.

GREEN AND GOLD WATER MELON.

THIS is the largest early variety in cultivation, melons ranging from 25 to 45 pounds, and its productiveness is equal to any of the red-fleshed sorts, while in delicious flavor it surpasses them all. The rind is the thinnest of any melon, the white being only $\frac{3}{8}$ to $\frac{1}{2}$ an inch in thickness. The flesh is a beautiful golden-orange color, free from any tinge of white or other color, even immediately around the seeds. The flesh is beautifully granular in appearance, juicy and sweet, and of unequaled flavor. The rich golden color in addition to its delicious flavor will make it most desirable as an ornament

GREEN AND GOLD WATER MELON.

for the table, especially if its golden slices are arranged in contrast with the crimson of the other sorts. Price, per pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.00.

Henry, Ills. Nov. 88. --I have raised a good crop of the Mammoth Silver King and Pompeii Onions the past season, and think they are all you claim for them.

H. J. Grawburg

NEW EARLY MARKET CELERY.

A STRAIN of Boston Market which our grower claims to be two months earlier than the former, so the second crop can be sold off the same land before the Boston Market begins to sell. It is a short, stocky, strong grower, and will blanch at any stage of its growth. A well grown plant is about 18 inches high, while at a height of 15 inches the plants are about 12 inches in circumference. While he does not claim it to be superior to the best existing varieties, he claims its extreme earliness makes it a most valuable sort for the market gardener to grow. We introduce it to our celery growers for reasons given above. Pkt., 25c.; 5 for \$1.00.

Our \$50.00 Cash Pumpkin Prize was divided as follows and paid November 15th: Robert Shedden, Pingree Grove, Ill., \$25.00, weight 140 $\frac{1}{4}$ lbs. H. L. Allen, Marion, Iowa, \$15.00, weight 140 lbs. Thos. Winter, Kewanee, Ill., \$10.00, weight 139 $\frac{1}{4}$ lbs.

Huron, Kansas, Jan'y 3, 1889. --Your garden seeds last year were the best I ever had. Frank Schletzbaum, Jr.

*** MILLER'S CREAM MUSK MELON. ***

ORIGINATED at Syracuse, New York, and ranks high as a market melon. Its flesh is a rich salmon in color, so thick it is almost solid; THE FLAVOR IS VERY SWEET AND DELICIOUS; THE SEED CAVITY IS UNUSUALLY SMALL; the rind is very thin and little netted; and the vines are strong growing and productive. The melon being nearly solid remains in condition several days without "falling" or loosening its seeds in the seed cavity as many melons do. It resembles our Osage, but we find our strain of the latter less liable to burst (which the Miller's sometimes does in a wet season,) and a better netting for shipping with larger size. We offer true stock of the Miller's Cream. Per pkt., 10c.; oz., 25c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.

MILLER'S CREAM MELON.

NOVELTIES AND SPECIALTIES for 1889

THE OSAGE MUSK MELON.

THE WESTERN MARKET WONDER!

During the summer of 1885 in a small way, and more largely in 1886, a new melon made its appearance in the markets of the leading Western Cities and immediately took the lead wherever it was shipped. This melon was branded "OSAGE" and as such averaged double the price of most other shipping kinds. Its origin being unknown, and the seed controlled by two or three growers who refused to sell it and who purposely mixed other vine seeds with their crops each season to destroy the melons for seed purpose; the true and original strain was so closely secreted that it was not sold even in the neighborhood where grown.

No variety of Musk Melon, so far as we are aware, has ever advanced in popularity and become at once so widely known as this variety. The past summer has been only the second season in the Chicago market, but it is now the favorite sort in nearly all of the leading hotels and restaurants, and is also well known by all commission men and largely by the general public, being offered on the Hotel and Restaurant Bills of Fare under its own name "OSAGE." One explanation of this is the very distinct appearance both of the outside and of the rich salmon colored flesh.

As we claimed last year, we control the seed from the leading grower who first shipped it to this market. The result justified our claim. Many parties who bought seed which purported to be "OSAGE" were greatly disappointed in the result. Our stock grown in 1888 has been again selected by the same grower with the same care, for which we have paid more than ten times the ordinary price for growing Melon Seed.

The product of our select seed will show slightly increased netting the coming season, as Melons so marked show less the unavoidable bruising in shipping than those with smooth skin.

While there is some variation in the shape of these Melons from the oval form of our illustration (a few being more

We present herewith a new accurate photo-engraving (about 1/2 natural size).

rounded), yet in saving seed none are used but those which show very thick flesh when cut and none having thin spots in the melon, or which have deeply cut lobes. The typical Melon which we save for seed weighs this Season from 7 to 9 lbs. and is 6 1/2 inches in diameter and 9 inches the longest way.

OSAGE MELON.—Skin dark green slightly netted on the lobes on the upper side, and on the best specimens a rich orange color where the melon lies on the ground, and on this side it is eatable within an eighth of an inch of the surface; flesh a rich salmon color. The shape is pointed oval—egg shaped most exactly expresses it—medium sized and the whole crop is very even, and extra heavy, owing to thickness of meat, no melons can equal it in this respect, not even the Hackensack.

Our trade mark shown herewith will be found on all our packages of the genuine.

Price, pkt. 10c.; 1-2 oz., 35c.; oz. 60c.; 1-4 lb., \$2.00; 1 lb., \$7.50.

WHAT GROWERS, DEALERS AND CONSUMERS SAY.

H. Kohlsaat says: The size of the Osage is just right for Hotel and Restaurant trade, each Melon being large enough to make, when cut in two, two orders, while the Emerald Gem and all such smaller sorts only answer for one order.

Sigourney, Ia.—The Osage Melons sell better than other cantelope melons; The Chicago Market was a very nice melon. B. D. Herrman.

Anna, Ill. July 25, '88.—The Osage that you furnished the seed for, are now ripe, and are good—just splendid. Some of my neighbors got seed from—of—cheap, and now they have a cheap crop of melons, and they are now gnashing their teeth, cursing Mr.— H. T. Eastman.

Palmer House, Chicago, Nov. 7, '88.—The Osage are the finest, thickest meat and best flavored melons that we handled at our tables during the season of 1888. W. J. Cook, Steward.

Hotel Richelieu, Chicago, Nov. 7, '88.—I consider the Osage the finest in the market for flavor and keeping qualities. E. H. Knauss, Sec'y.

Leland Hotel, Chicago, Nov. 7, '88.—I have used a large quantity of the Osage on the tables of the Leland Hotel, and they have always given the best of satisfaction. Daniel Lacey, Steward.

F. Nickerson & Son.—We handle large quantities of melons every season, and find the Osage to sell better than any other kind.

Parker Bros.—The Osage is the leading melon on the street. Sold well, especially in large lots, on account of its good keeping qualities.

M. Baker & Co.—We cannot speak too highly of the Osage Melon. They always bring a considerable higher price and sell better than any other melon.

Joseph Spies.—People think there is no melon like it. They sell first-class and ship well.

OUR MAMMOTH \$50.00 PUMPKIN.

Whittier says:

"WHEN THE CARE-WEARIED MAN SEEKS HIS MOTHER ONCE MORE,
AND THE WORN MATRON SMILES WHERE THE GIRL SMILED BEFORE,
WHAT MOISTENS THE LIP AND WHAT BRIGHTENS THE EYE?
WHAT CALLS BACK THE PAST LIKE THE RICH PUMPKIN PIE?"

"AND THE PRAYER, WHICH MY MOUTH IS TOO FULL TO EXPRESS,
SWELLS MY HEART THAT THY SHADOW MAY NEVER BE LESS.
AND THY LIFE BE AS SWEET, AND ITS LAST SUNSET SKY
GOLDEN-TINTED AND FAIR AS THY OWN PUMPKIN PIE!"

Following which we say, try our Mammoth Fifty Dollar Prize Pumpkin:—The flesh and skin is of a bright golden yellow color, very fine grained, of excellent quality, and notwithstanding its enormous size, it is one of the very best pie pumpkins ever grown, and a splendid keeper. This enormous variety is said to have been grown to weigh three hundred pounds. Price, Packet 10c.; oz., 30c.; 1/4 lb., 60c.; 1 lb., \$2.00.

OUR "PUMPKIN SHOW."

\$50.00 CASH IN PRIZES. To encourage our customers in the vine growing sections of the West, and believing they can if they will beat all Eastern records, we offer a cash prize of \$30.00 for the heaviest, and \$20.00 for the second heaviest, grown in 1889 from our seed. All reports of weights to be sent in by October 15th, at which time the prize winning specimens will be ordered sent to us (at our expense) and cash forwarded to the successful competitors.

MAMMOTH PUMPKIN.

NOVELTIES AND SPECIALTIES FOR 1889

W. A. Graham's Seed Store.

"MAUD S" PEA.

MAMMOTH POMPEII ONION.

For exhibition purposes, where they always attract attention, it is an excellent companion to the Silver King when shown together, being equally large and of different color. Theseed of this, as well as that of the Silver King has been purchased direct from the producer at a high price, and can be relied upon as genuine. We offer a CASH PRIZE of \$5.00 for the two largest onions of this variety, under the same conditions as our prize offered on Mammoth Silver King. Price, per pkt., 10c.; oz., 30c.; ¼ lb., 90c.; lb., \$3.00.

BLUE-PODDED BUTTER BEAN.

A very showy bush, leaves and stem blackish-purple, and bearing pinkish-purple blossoms and rich deep blue pods, about six inches long. It bears very freely and pods when cooked are of a rich green, very tender, stringless and of delicious flavor. A very ornamental bush and a decided novelty. Per pkt., 10c.; pint, 35c.

CHINESE LONG GREEN CUCUMBER.

A very fine sort, not exactly new, but little known and cultivated and worthy of special recommendation. The fruit grows 10 to 14 in. long. Flesh very white, thick and tender. Very productive and bears for a long time. Pkt., 5c.; oz., 20c.

PARIS PICKLING CUCUMBER.

Produces an abundance of handsome miniature cucumbers; thin, long, almost cylindrical, with few spines, and of a beautiful dark green color; admirably fit for making pickles of the finest quality; of vigorous and rapid growth.

Pkt., 10c.; 5 for 35c.; oz., 60c.

"MAUD S" EARLIEST PEA IN THE WORLD.

The "Maud S" pea which we introduced last season has proven to be all we claimed for it. Mr. Allan, the veteran pea grower who selected this strain from the best first earlies he could obtain says: "MAUD S is the earliest," and so our customers have found it the past season.

This is a first early Market Pea, much similar in season and habit of growth to such standard peas as "First and Best," "Earliest of All," "Daniel O'Rourke," "Phila. Extra Early," etc., but our grower, referred to above, thinks his carefully selected strain of "MAUD S" beats them all. Below we give some statements from our customers who grew the pea the past summer.

Price, per pkt., 10c.; pint, 25c.; quart, 45c.; peck, \$1.75; bushel, \$6.00.

Veedersburg, Ind., Aug. 3rd, '88. --The seeds you sent me last Spring gave the best of satisfaction. The Maud S Peas are all they are recommended to be. C. D. Yonkey.

Montello, Wis. The Maud S is an excellent variety, and two or three days earlier than Laxton's Alpha, which has been my standard for best of the earlies. Evolution is also first class, and I expect to continue planting it. C. S. Kelsey.

LAXTON'S "EARLIEST OF ALL."

One of the first and best for market gardeners' use; ripens the whole crop in six weeks; the vines are short, about thirty inches high, bearing an abundance of handsome, well-filled pods, each containing six to eight medium sized round peas of excellent quality. The great advantage in the fact that the entire crop ripens at the same time and such a short one at that, combined with its productiveness, renders it one of the most profitable kinds for the market gardener to raise.

Price, per pkt., 10c.; pint, 25c.; quart, 40c.; peck, \$1.65; bush., \$6.00.

LANDRETH'S EXTRA EARLY PEA.

This standard sort, put up in sealed red bags, has always been a great favorite with the Chicago gardeners and we have again secured a supply which we offer at Landreth's prices. Pkt., 10c.; pint, 25c.; quart, 40c.; peck, \$1.50; bush., \$5.50.

4 3/4
POUNDS

HIS mammoth variety, introduced four years ago, is one of the largest in cultivation, averaging from 15 to 22 inches in circumference and often weighing 2½ to 4 pounds each. It matures early and is uniformly of large size and fine shape, being flattened but very thick. The skin is of a beautiful silver white, flesh snowy and tender, of a very mild, sweet flavor. The accompanying illustration gives a

good idea of the handsome appearance and mammoth size of this variety. We know of no variety of this vegetable which has attracted so much attention as this. Its striking size and handsome appearance, as well as mild flavor, recommend it for exhibition at fairs, for the fancy market, as well as the home table. Every customer who has not seen this onion should include it in his order for 1889. We offer a CASH PRIZE of \$10.00 for the two largest onions raised from seed purchased of us this year—the onions or reliable affidavits of their weights to be sent to us before October 15th.

Price, per pkt. 10c., oz. 35c., ¼ lb. \$1.00, lb. \$3.50.

CASH PRIZE
\$10.00 FOR LARGEST SPECIMENS

NOVELTIES AND SPECIALTIES for 1889

Vaughan's Seed Store.

CAULIFLOWER

EARLIEST DWARF ERFURT.

FOR at least 40 years and probably more, the city of Erfurt, Germany, has been renowned for its Cauliflower growing, and as a natural consequence its Cauliflower Seed, with the natural improvement which always follows large cultivation and selection, the Erfurters have brought their strains to the very highest perfection. We find in various seed catalogues scores of alleged NEW Cauliflowers under new and fancy titles, but the real truth is these are only a selection from the Erfurt strains, than which none better can be had. We have seen fit for several years to import direct from Erfurt the highest priced seed obtainable of the above strain, "Earliest Dwarf," and though others may have equally good, we believe none are better and find ours runs invariably true to type. Pkt., 50c., 1/4 oz., \$2.00; oz., \$7.00; 2 oz., \$12.00; 1/2 lb., \$20.00.

EDMUND'S TURNIP BEET.

EDMUND'S TURNIP BEET.

A SELECTED strain which is very uniform and even in type; the flesh is deep blood red color and exceedingly sweet and tender in quality. It is round and smooth in shape and of good market size. It does not grow over large where room is permitted, as many kinds are apt to do. It grows a small top and but a single tap-root, which fact commends itself to the gardener's attention who grows beets for bunching purposes. It is very early, and for marketmen's use, is justly popular and much called for wherever it has been sold. This is certainly one of the very best Beets in cultivation. Price, per pkt., 5c.; oz., 20c.; 1/2 lb., 30c.; lb., \$1.00.

PEACH TOMATO.

THIS is the most delicious and handsomest Tomato ever introduced, having an appetizing fruity flavor not met with in any other. The fruit is of uniform size, and resembles a peach in shape, size and color, which is a deep rose and orange amber beautifully blended, and covered with a delicate bloom or furze like a peach. It is without a rival for eating from the hand, the flesh being of a rich and most delicious flavor. The skin is very thin and can be peeled off like that of a peach. The entire fruit is tender and free from core, even around the stem and taken in all this is a vegetable which should have a place in every garden. Per pkt., 10c.; 3 for 25c.; 1/4 oz., 35c.

SQUASH—

SUMMER CROOKNECK.

THIS is an old staple article of the Seedsman's stock, and though we DO NOT claim our seed to be the "BEST IN THE WORLD," yet it is as pure as we have seen and the product is as near to what the squashes should be as usually grow. Per pkt., 5c.; oz., 10c.; 1/4 lb., 25c.; lb., 75c.

NEW SQUASH—ILLINOIS BEAUTY.

A N Autumn variety in season from September to December, average size 12 to 14 inches long, and 4 to 5 inches in diameter. Very thick meat, having almost no seed cavity; remarkably distinct and showy in appearance, one or both ends being of deep green color while the centre band is of rich deep orange, slightly ribbed, but of excellent shape for the market and of good quality. Very prolific and a strong grower. Pkt., 10c.; 3 for 25c.; oz., 40c.

ILLINOIS BEAUTY SQUASH.

East Portland, Oregon, Jan. 2, '89.—Last Spring I purchased of you a number of packets which were large and well filled with the very best seeds; it seemed as if they all grew and made nice thrifty plants.

MRS. W. A. OGILBEE.

CAULIFLOWER, EARLIEST DWARF ERFURT.

NEW DWARF CHAMPION TOMATO.

IT is entirely distinct in habit of growth and foliage from any sort ever produced. The vines are dwarf and compact in habit, grow stiff and upright, with thick and short-jointed stems. The compactness of habit is retained in all stages throughout the season; foliage dark green in color. Heavy manuring tends to increase the abundance and size of fruit instead of ruining the vine. It is remarkably early, ripening fruit as early as July 1st. It will yield double the quantity of extra early fruit per acre than can be obtained from any other tomato. As a cropper, it is probably unsurpassed, and will, owing to the smaller amount of space required between the plants, yield more to the acre than any other variety. In form and color the fruit closely resembles the Acme; it is always smooth, symmetrical and attractive in appearance; the skin is tough, and the flesh solid; ripens well close round to the stem, and is not so much subject to crack as some other sorts.

Pkt., 10c.; oz., 50c.; 1/4 lb., \$1.50.

SQUASH, White Bush Scallop. Private Stock.

WE have secured at a high price, some seed of an extra large strain of the above well-known kind,—that has been very carefully selected by a reliable Market Gardener for a number of years. A very select and profitable strain for market. Stock limited. Per pkt., 15c.; 5 for 50c.

PIKE'S PEAK OR SIBLEY SQUASH.

THE form is new, having the stem at the swelled end. The seed alone, being of very peculiar shape and color, brands the Squash as original and distinct. The shell is pale green in color, very hard and flinty, being at the same time so very thin and smooth as to occasion the least possible waste in baking. The flesh is solid, thick, a vivid brilliant orange in color, and is possessed of rare edible qualities, being dry, and really wonderful for fineness of grain and the rich and delicate flavor peculiarly its own. The weight ranges from eight to eleven pounds. It ripens with the Hubbard, and is more prolific, a long keeper and a good shipper.

Price, pkt., 5c.; oz., 15c.; 1/4 lb., 50c.; lb., \$1.65.

Greenville, Ill., Aug. 3, '88.—Your Dwarf Champion Tomato has proved all that was claimed for it in the following particulars: As early as any good Tomato; it has ripe fruit earlier than any other variety; perfect in form and color; satisfactory size; habit of plant compact and bushy. Planted 3 feet by 20 inches gave room to pass through without touching a vine. S. F. Minor.

PIKE'S PEAK (OR SIBLEY) SQUASH.

NOVELTIES AND SPECIALTIES for 1889

**VAUGHAN'S NEW
EXTRA EARLY
TURNIP
RADISHES**

VAUGHAN'S RADISH SEED.

THROUGH our large trade with market gardeners and florists of the West, we have met with a large demand for this vegetable, and in consequence have kept the largest variety of any seedsman in the country, as our catalogues for the past five years will show. The result has been that we have obtained a sale of our Radish Seed to gardeners in nearly every large city in the Union. We deem the following (three being entirely new) worthy of special mention:

EXTRA EARLY FORCING RADISHES.

STRICTLY new, secured by us in Enrope the past season; are worthy the attention of every Market Gardener. In earliness these varieties surpass our Very Early Olive shaped Deep Scarlet Short Top. They are admirably adapted for cultivation under glass, on account of the small size of their foliage. The upper one shown in the engraving is rather flat and of a carmine rose color, the two others are globular in shape; the white tip of the second is sharply delineated and gives a fine appearance to the bunches ready for marketing. The bright color and elegant shape of the third makes it very salable. Prices:

EXTRA EARLY CARMINE TURNIP,	-	Pkt., 10c.;
EXTRA EARLY SCARLET GLOBE WHITE TIP,	-	oz., 20c.;
EXTRA EARLY BRIGHT SCARLET,	-	¼ lb., 45c.;
		lb., \$1.50.

RADISH—Scarlet Turnip, White Tip, Select Stock.

A VERY fine strain of this well known kind, even in size, smooth and of a fine bright scarlet color.

Per pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

RADISH—SURPRISE.

A NEW Spanish variety, medium in size, oval in shape and of a light brown color. Of very early, quick growth. It is remarkable for remaining longer in fine condition without becoming pithy than any other very early sort. It has also the same fine quality when sown in the middle of the summer.

Per pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.50.

RADISH—NON PLUS ULTRA.

THIS is a turnip sort of German origin; of fine round form, bright scarlet color, of tender flesh and delicate flavor; its remarkably quick growth and very short top render it specially valuable for forcing. Sent out by us first last year; it has given the greatest of satisfaction to our customers. We have secured the best stock of this new sort in the market and those who get it from us will not be disappointed.

Per pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

RADISH—EARLIEST OLIVE, DEEP SCARLET SHORT TOP.

A NEW and very distinct type of the well-known olive shaped radish which is of perfect form, smooth skin, fine color, and with very short leaves. This, combined with its extremely quick growth, taking only three weeks to mature, renders it extraordinarily valuable for forcing, while it does equally well in the ground. The flesh is pure white, crisp and of very pleasant taste. A great favorite with gardeners at Chicago.

Per pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

RADISH—SCARLET GLOBE.

NOT a new, but most desirable turnip sort for hot-bed forcing; very early and in flavor mild, crisp, juicy and tender. Top small and will stand the heat well without becoming pithy. Good for garden as well as forcing.

Per pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

NEW RADISH—VAUGHAN'S MARKET.

A HALF-LONG white of quick growth, very smooth and regular in appearance, with very pure white skin and exceedingly delicate and brittle. It sells at sight. Forces quickly and is also desirable for open ground. Our stock is limited. Per pkt., 10c.; oz., 20c.; ¼ lb., 50c.; lb., \$1.50.

DeKalb, Ill., Oct. 23, '88.—I can testify in highest terms as to quality and yield of Earliest Olive, Deep Scarlet Radish and Vaughan's Pickling Onion.

A. W. Sprague.

LaPorte, Ind.—Non Plus Ultra Radish, shortest tops of any I ever tried, making it the very best for early forcing. If seed is not too high, will plant no other.

John A. Brown.

MAMMOTH SANDWICH ISLAND SALSIFY.

THIS variety is of enormous size, twice that of the ordinary French, pure white, very tender and delicious. Invaluable for the market gardener. Per pkt., 10c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.60.

SCARLET GLOBE RADISH.

EARLIEST OLIVE DEEP SCARLET SHORT TOP.

MAMMOTH SANDWICH ISLAND SALSIFY.

WHITE BARLETTA ONION.

INTRODUCED by us last season, it has proved all we claimed for it, which was as follows: this variety is most distinct on account of its great earliness; it is three weeks in advance of the White Queen. It is of a beautiful waxy white color and grows 1 ¼ inches in diameter and ¾ of an inch thick, with finely formed bulbs, slightly flattened at the top. Its earliness will highly recommend its use as a substitute for Onion sets and it is without a rival for pickles.

Per pkt., 10c.; oz., 25c.; ¼ lb., 75c.

WHITE BARLETTA.

NOVELTIES AND SPECIALTIES for 1889

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NEW PEARL ASTERS.

THIS entirely new and distinct class of Asters offered by us the first time last year is superior to most other types. The plants form handsome pyramids about 15 inches high and literally covered with a mass of the most perfect flowers, round in shape, and $3\frac{1}{2}$ to 4 inches in diameter, finely and fully imbricated, and borne on long stems. They are most admirably adapted for pots and borders and especially valuable for cut flowers.

White or Pink, each, per pkt., 25c.

ANTHERICUM LILIASTRUM MAJOR.

One of the most attractive of our late spring flowering perennials, producing strong spikes of pure white flowers, very much in the form of a Gladiolus. The individual flowers are very large, pure white, and produced in great abundance, easily grown in any ordinary soil, and perfectly hardy. Certainly one of the very best perennials grown; no collection can be complete without it. It is grand in the borders, and of the highest possible value for cutting.

Per pkt., 15c.; 2 for 25c.

NEW MIMULUS "EMPEROR."

PHLOX DRUMMONDI FIMBRIATA.

The petals of all other Phlox varieties are entire, but in this variety they are partly fringed, partly three-toothed, the centre teeth are almost twice as long as the lateral ones, all distinctly bordered with white, which together with the bright eye of the centre, picturesquely contrasts with the magnificent velvety colors, consisting already of more than twenty-five splendid distinct shades. We offer it in finest mixture.

Per pkt., 20c.; 3 for 50c.

NEW MIMULUS "EMPEROR."

Our engraving is a faithful representation of this remarkable new variety, which is a cross between the well-known Hose-in-Hose Mimulus or Monkey-Flower and the newest large-flowering varieties. The calyx is extremely large and of the same rich color and markings as the true corolla, making this one of the most showy and attractive of our novelties. It has been obtained by years of patient selection and will be prized equally for the garden and for pot culture.

Price, per pkt., 30c.

NEW PYRAMIDAL ROCKET CANDYTUFT.

A new pure white gigantic annual Candytuft, which will probably prove to be the finest form in cultivation; it is possessed of a strong free growth, about 1½ feet high, and producing monstrous rocket-like spikes of flowers; the individual flowers, which are closely placed upon the spikes, are of large size, fine substance, and the purest whiteness, and very sweetly fragrant; one of the most effective annuals in cultivation.

Per pkt., 10c.; 3 for 25c.

BEGONIA SCHARFFIANA.

New species from Brazil with large, thick, velvety leaves, emerald green on the surface and deep purplish-red underneath. The flowers are large and pure white. This species is entirely distinct from any of the ornamental-leaved Begonias in cultivation, and the fact of its being much harder than the Rex Begonias renders it best adapted to house culture.

Per pkt., 35c.

NEW DWARF PHLOX.—Delicata.

A new and very distinct color of these charming Dwarf Phloxes, being of a delicate flesh pink changing to almost white, with a carmine-red center. Per pkt., 25c.

PHLOX FIMBRIATA.

ANTHERICUM LILIASTRUM.

PHLOX STAR OF QUEDLINBURG.

A very striking novelty of extraordinary character. The growth is generally dwarfer, and the habit more compact than that of the Phlox Drummondii; the chief difference, however, consists in the flowers, the centre petals, which are five in number, being much elongated, from four to five times the length of the lateral ones, thus giving the flowers a most distinct and regular star-like appearance, their attractiveness being greatly enhanced by the broad white margins which border the edges of the petals. It has been awarded a first-class certificate of merit. Many colors, mixed, per pkt., 20c.; 3 for 50c.

PHLOX DRUMMONDI GRANDIFLORA.

We have a special strain of this great favorite which we can particularly recommend to our customers. Our mixture contains an extremely large variety in the finest and most brilliant colors. Per pkt., 10c.; 3 for 20c.

VAUGHAN'S
NEW PEARL ASTER.

Laughan's Seed Store.

NOVELTIES AND SPECIALTIES for 1889

MINIATURE SUNFLOWER.

The flowers of this new sort are very large and of a most delicate satiny rose tint, each petal being marked with a broad and shining carmine spot which contrasts charmingly with the ground color. Price, per packet, 25c.

VERBENA HYBRIDA COMPACTA.

This new strain of Verbena is of dwarf and compact habit, forming neat globular pyramids only about 5 inches high, producing its flower-stalks almost in candelabra form, which renders them extremely well adapted for carpet bedding and pot culture; they are a decided improvement on the older varieties with trailing habit.

WHITE, - - - per pkt., 25c.
SCARLET, - - - " 25c.
MIXED COLORS, " " 25c.

ZINNIAS

Are undoubtedly among the most showy and ornamental of flowers for either beds or borders; are equally desirable for bouquets. They have been greatly improved of late, and by careful cultivation and selection they have almost attained a state of perfection. We offer the following new improved strains:

ZINNIA GRANDIFLORA PLENISSIMA.—We offered this variety for the first time last year, and have found it a decided improvement on any strain of Zinnias heretofore offered. The plant is a vigorous grower, reaching a height of about three feet, and bearing its flowers in great profusion. The blossoms are extremely double and very brilliant in color, showing shades not before seen in any collection, while in size they surpass all Zinnias, often measuring

five to six inches in diameter. It makes a grand display either as solitary plant on a lawn or in masses, on account of its stately growth, and the brilliancy of its flowers.

Per pkt., 10c.; 3 for 25c.

ZINNIA ELEGANS TOM THUMB

(Novelty 1888).—A new and decided improvement on the Dwarf Zinnias, which with the exception of a very small percentage will produce plants from 4 to 12 inches high, with a diameter of from 6 to 14 inches, forming lovely, compact and free flowering bushes, the flowers of which resemble those of the Pompon race. These plants with their very brilliant colors, will make charming borders and edgings for beds. Per packet, 25c.; 3 for 60c.

ZINNIA TOM THUMB.

STATICE SUPERBA.

ASPHODELUS LUTEUS.

A strong-growing perennial, 3 to 4 feet in height, producing spikes of bright yellow flowers, continuing in bloom for a considerable length of time; a highly decorative plant. Per pkt., 10c., 3 for 25c.

ASTER TOWNSENDI.

One of the finest of Michaelmas Daisies, it is perfectly hardy, growing about 2½ feet high; it is possessed of a comparatively close yet free habit, and produces sheets or masses of large striking flowers which are of a deep rich purplish-blue color remaining in condition for a considerable length of time. Seed sown in a gentle heat or even a cold frame would produce plants which would flower in August following. Per pkt., 10c.; 3 for 20c.

ZINNIA GRANDIFLORA PLENISSIMA.

Notice our MIKADO COLLECTION of Flower Seeds, page 56; most liberal offer ever made. Also our CHILDREN'S DEPARTMENT on page 36, with Twenty-five Dollar Cash Prize Offer.

HARLEQUIN ASTER.

Vaughan's Seed Store.

NOVELTIES AND SPECIALTIES for 1889

|| KALANCHOE CARNEA. ||

THIS strikingly beautiful decorative plant commences to flower at Christmas, and continues in bloom throughout January and February, and is a most welcome addition to the winter flora, its bright and pleasing color being very attractive during the dull winter months. The plant was recently introduced from South Africa, is of easy culture, very floriferous, and succeeds well in a temperature of 50° to 55°; it attains a height of about 18 inches, and is of good bushy habit. The flowers, which are borne in clusters, are of wax-like consistency, last a long time in perfection, are of a beautiful delicate color, and, in addition, are deliciously fragrant, which greatly enhances the value of this charming plant. IT WAS AWARDED A FIRST-CLASS CERTIFICATE BY THE ENGLISH HORTICULTURAL SOCIETY.

Price, per packet, 50 cents.

NEW BLUE SALVIA ESMERALDA.

This fine perennial Sage forms a plant about 2 ft. high and is a very profuse and early bloomer, forming a handsome pyramid covered with flowers throughout the Summer. The flowers are of a beautiful sky-blue color with dark veinings, borne in loose, graceful spikes. Must be sown early.

Per pkt., 20c.; 3 for 50c.

SNOWFLAKE CANDYTUFT.

Extremely floriferous new sort from Castile. The plants grow about 7 inches high, forming a very neat, round bush covered with the finest flowers. They are most valuable for pot-culture, carpet-beds and groups. A continuous bloom throughout the whole year may be had by repeated sowings. A most valuable addition to this popular family.

Per pkt., 10c.; 3 for 25c.

KALANCHOE CARNEA.

AMARANTHUS "STANLEY."

The Amaranthus undoubtedly rank among the showiest and most useful annuals for the flower garden, and for their intrinsic merits and easy culture deserve a much greater popularity. We have in this new kind, one of the finest of its class. The plants grow only about 15 inches high and produce a great number of slender stalks, which are soon covered with long, thick panicles of purplish-red flowers. It commences to bloom in a remarkably short time after sowing, and will continue until late in the Fall if the older stalks are repeatedly removed. Its dwarf and compact habit of growth and brilliant flowers render

the Stanley a most welcome addition as a bedding and border plant. Per pkt., 20c.; 3 for 50c.

DAHLIA GRACILIS.

Although first introduced last season, this new variety has created quite a stir in floral circles and naming it **QUEEN OF THE SINGLE DAHLIAS** we do not in the slightest exaggerate its claim to prominence. It has been awarded numerous first prizes at various exhibitions and has elicited general admiration wherever shown. The flowers are of the brightest of colors, white, pink, cherry, magenta, orange, yellow and deep purple, and striped, rayed, mottled and blotched in the most grotesque and charming manner. The habit of the plant is extremely graceful, its many beauties combining to render it the most gorgeous of recent introductions. Taking into consideration that the culture of Dahlias from seed is one of the easiest, they being sown in February, March or April, will flower the same season, this novelty can not fail to be universally grown all over the country.

Price, per pkt., 15c.; 2 for 25c.

NEW DWARF DAHLIA GRACILIS.

PETUNIA, STAR OF LYON.

This most magnificent variety originated from the above Dahlia gracilis which we first offered last year and which elicited so much admiration. This new variety possesses all the fine qualities of its parent as to brilliantly colored, striped, spotted and mottled flowers, combined with the extraordinary advantage of growing only 20 inches high, forming handsome globular bushes, useful for borders, beds and masses.

Per pkt., 25c.

PETUNIA, STAR OF LYON.

The finest new strain of single Petunias; large flower, distinctly marked with a regular large white star on a purple ground. Splendid for bedding. Per pkt., 10c.

DAHLIA GRACILIS.

Remember that a Two Dollar bill pays for \$2.50 worth of Seeds in Packets.

W. H. H. Seed Store.

NOVELTIES AND SPECIALTIES FOR 1889

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3 NEW SWEET PEAS.

BOREATTON.—A very fine dark Pea with bold stout flowers, the standard being a rich shining bronzy crimson, the wings of beautiful crimson purple, shaded with rose. Per pkt., 25c.

"NELLIE JANES."—Pure pink and white (not Painted Lady), nearly two weeks earlier than most sorts, a most profuse bloomer with long stem, continuing in flower until the late frosts; from two to four blossoms on a stem. Have cut by actual count over 500 blooms from one plant in sixty days and 6000 in one day from a row 200 feet in length. IT HAS FOR THE LAST 5 YEARS PROVED TO BE THE BEST SELLING SORT IN CHICAGO. Although not a novelty, this is the first time seed of this sort has been offered for sale. Mr. Jaues, who named it, has raised this sort for the last five years and no inducement, however great, could prevail upon him to dispose of any seed to his competitors. Knowing the superior qualities of the

"Nellie Janes," we have secured his entire stock at an enormous price. Per pkt., 25c.; 3 for 60c.

VIOLET QUEEN.—Dwarfer in habit than the other varieties; the flowers range in color from the deep mauve of the keel to light violet of the guard petal. Per pkt., 15c.

LOBELIA—ROYAL PURPLE.

(CERTIFICATED BY THE ENGLISH ROYAL HORTICULTURAL SOCIETY.)

In color this fine Lobelia is quite different from any other variety in commerce, being a very rich shade of violet purple without any trace of blue, as in all other sorts, and is very striking and effective, thus showing off its clear white eye. The habit is semi-compact, not so much so as the pumila varieties, but not at all straggling. Per pkt., 30c.

NEW TRIUMPH ASTER.

This novelty is undoubtedly the most beautiful and perfect of all dwarf Asters, both on account of the habit of the plants, and the form and beauty of the flowers. It forms an entirely new class, somewhat resembling the Dwarf Chrysanthemum Aster in habit at the time when it shows its buds, but in developing its large and beautifully shaped flowers it assumes quite another aspect. The flowers bend a little on account of their weight but do not droop so as to impair their beauty, each plant forming an elegant bouquet of itself about 7 to 8 inches high. The individual flowers measure from 2½ to 3 inches across and are of the most faultless Paeony form, all the petals being beautifully incurved. The color is peculiarly rich and brilliant; when beginning to bloom it is a pure scarlet, but when in full bloom it changes to a magnificent deep satiny scarlet. It produces its flowers in great abundance, each plant bearing at least 30 to 40 handsome flowers. It is well adapted for borders, carpet bedding, or for pot culture. Per pkt., 25c.

LOBELIA, ROYAL PURPLE.

COSMOS.

This plant is of strong growth, having elegant foliage, and for fall blooming has no superior. Seed sown in April or May and transplanted to open ground will produce plants five or six feet high by September, and from then till November will be covered with hundreds of blossoms three inches across. Planted in pots and brought inside to flower like Chrysanthemums, they are grand. The colors are of various shades, from pure white to purplish crimson. Both foliage and flowers are unsurpassed for bouquets and vases. It is one of the most beautiful fall flowers, and will please all who grow it with a little care and attention. Per pkt., 10c.; 3 for 25c.

COSMOS BIPINNATUS.

PRIMULA OBCONICA.

PRIMULA OBCONICA.

This is undoubtedly one of the most useful flowering plants grown; if sown early in spring the seedlings will begin to bloom in May or June and continue to bloom throughout the whole year. The flowers are of a soft lilac shade and very charming. It is one of the most useful Primulas for pot culture and also succeeds well in the open border during the summer months. Per pkt., 25c.

FAXON'S ROYAL MIXED ASTERS.

This mixture includes Truffaut's, Pompon and Victoria varieties, and contains over twenty-five distinct colors, grown by Mr. Faxon, of Massachusetts, who for a number of years has given special attention to the cultivation of this plant. The numerous prizes and gratuities which have been awarded him by the Massachusetts Horticultural Society at their recent large competitive exhibitions fully proves to what perfection he has brought this beautiful annual. We offer Faxon's Royal Mixture, large pkt., 25c.

ANTIGONON LEPTOPUS.

A beautiful climber, entirely distinct in color, called the "Mexican Mountain Rose." Flowers a rich shade of carmine-scarlet, borne in large clusters. It is a perennial plant, perfectly hardy south of Washington. In the Northern States it makes a grand green-house climbing plant. Per pkt., 25c.

If you receive two of our Catalogues you can do us a great favor by handing the extra copy to a neighbor who uses seeds.

NEW TRIUMPH ASTER.

NOVELTIES AND SPECIALTIES FOR 1889

CAMPANULA CUP AND SAUCER.

TROPAEOLUM LOBBIANUM ASA GRAY.

THE *Tropaeolum Lobbianum* undoubtedly rank foremost among the annual climbers, the colors being much more distinct and brilliant than those of other *Nasturtiums*. This new variety is of the lightest color yet obtained in that class, and is of the softest sulphur-yellow, a very delicate and new shade. It is certainly destined to be one of the leading sorts. Price, per packet, 25c.

ARISTOLOCHIA ELEGANS (New Dutchman's Pipe).

THIS new greenhouse climber produces its handsome and elegant flowers when still small; they are of a rich dark purple color, marked throughout with irregular creamy white blotches, while the throat is yellow, bordered with a broad dark red margin. Per pkt., 25c.

Almont, Mich., Sept. 20th, '88 -- It gives me much pleasure in speaking of the *Lilium Auratum* and the Scarlet (*La Brillante*) Asters you so kindly sent us. The Lily was a perfect beauty, and the Asters, I cannot say too much in praise of them for they were the handsomest things of this Aster kind that I ever saw. Mrs. Alex. Springett.

DWARF NASTURTIIUM--LADY BIRD.

DWARF *Nasturtiums* form a most valuable class of Bedding Plants, blooming profusely through the Summer; they thrive in any soil and show the most distinct and glowing colors. This pretty new variety is the result of many years of patient labor and selection, and is entirely distinct in color and marking. The ground color is a rich golden yellow, each petal barred with a broad vein of bright ruby crimson, starting from the base. It is a charming addition to the Tom Thumb section and we heartily recommend it to all lovers of this richly colored and showy flower. Per pkt., 10c.; 3 for 25c. For other *Nasturtiums*, see page 52.

NASTURTIIUM AURORA.

THIS magnificent new color is a valuable addition to our grand list of Dwarf *Nasturtiums*; the plant forms a perfect globe, and is literally covered with flowers, completely hiding the foliage when in full bloom. The flower is of a deep chrome-yellow, the upper petals showing lighter reflexes while the two lower petals are blotched with purplish-carmine and marked with bright carmine veining. The color is very pleasing, and if grouped in solid beds the effect is grand. Per pkt., 20c.; 3 for 50c.

NEW STRIPED DOUBLE PINK.

HARDY PERENNIAL GAILLARDIAS.

THESE rank undoubtedly among the choicest of Hardy Perennials, the flowers are large, very numerous, excellent for cutting and of the most brilliant shades of orange, crimson, scarlet and vermilion, and very often a combination of all these colors in one flower. Many colors mixed, per packet, 10c.

NEW DAISY--SNOWBALL.

A FEW years ago we first offered the Longfellow Daisy, now universally planted and admired, and this season we take pleasure in introducing a sport of that charming variety which possesses all the good qualities of its parent: long stem, free bloom and large double flowers, about 80 per cent. of which are extremely large and pure white, justifying its name; the others will be Longfellow. This flower needs no recommendation as a bedding and border plant. Per pkt., 25c.

NASTURTIIUM, "LADY BIRD."

TRITOMA (Red Hot Poker Plant).

A VERY handsome autumn-flowering plant, equally well suited for the mixed border or shrubbery, or for planting in lines where there is a background of green foliage. The large flowers are of a coral-red, fading to orange, borne on long stems. Height 3 to 4 ft. Pkt., 10c.

NEW SNOWBALL DAISY.

NEW PINK, THE BRIDE.

A NEW and very charming variety of the well known and popular class of Japan Pinks. The handsome large flowers are pure white with a deep purplish red center, surrounded by a still darker ring, forming a very pleasing contrast with the white ground color. Pkt., 25c.

NEW STRIPED DOUBLE PINK.

THIS beautiful variety also belongs to the Japanese class and is one of the finest of the whole family. The flowers, which are very large and double, are beautifully fringed and of the greatest variety of colors. A bed of these in the flower garden will make a grand display and at least a package of it should be included in every order. Per pkt., 10c.; 3 for 25c.

CAMPANULA--CUP AND SAUCER.

A NEW and beautiful variety; a most desirable and attractive addition to this class of old garden favorites. The bell or trumpet is nearly four inches in diameter, presenting the form of a saucer, as shown in illustration. The plant is of strong growth, quite as hardy and floriferous as the old blue variety, and is very elegant and handsome when in flower, the blossoms literally hiding the plant; it is highly ornamental in the flower borders or potted for conservatory decoration. Price, per pkt., 10c.; 3 for 25c.

POLE BEANS.—STANGEN BOHNEN.

Pole Beans, being tender, ought not to be planted until the ground is dry and warm. A well-manured, sandy loam suits them the best. Plant in hills, 6 feet apart, 6 to 8 beans to the hill, eyes downward, afterwards thin to 3 plants in a hill. Set poles 8 or 10 feet long before planting seed. One quart of seed plants 100 to 200 feet of row, according to size of beans.

NEW EARLY GOLDEN CLUSTER WAX.—A very desirable

new sort, which is only seven days later than the Dwarf Golden Wax. The pods are very tender, six to eight inches long, of large size, and are borne profusely in large clusters of three to six, and are of a beautiful golden yellow color, which they retain a long time after being picked. It snaps easily, is stringless, cooks tender, and is of delicious flavor. Pkt., 10c.; pint, 35c.; qt., 55c.

LAZY WIFE.—Pods are very broad, thick, fleshy and entirely stringless, they furthermore retain their excellent qualities until almost ripe, but above all it is the immense productiveness which renders this kind indispensable. Pkt., 10c.; pint, 35c.; qt., 55c.

Dutch Case-knife.—Good corn-hill bean; one of the earliest Pole Beans; pods long

and flat, beans white, used green and dry. Pkt., 10c.; qt., 45c.; peck, \$1.65.
Horticultural Cranberry.—An old, popular variety, excellent as a snap or shelled bean; speckled. Pkt., 10c.; qt., 50c.; peck, \$1.75.

Giant Red Wax.—Very productive; long, clear yellow pods, thick and fleshy; seeds red. Pkt., 10c.; qt., 55c.

Creaseback Pole Bean.—Early, large, long and stringless pods; splendid quality, a great southern favorite. Pkt., 10c.; pint, 35c.; qt., 60c.

SCARLET RUNNER.—A favorite, both as a snap bean and for its flowers, seeds broad and kidney-shaped. Pkt., 10c.; qt., 55c.

WHITE RUNNER.—Similar to above except in color. Pkt., 10c.; qt., 50c.

LARGE LIMA SELECTED SEED.—An extra selection of seed stock; large, fine beans. Pkt., 10c.; qt., 50c.; peck, \$2.25.

LARGE LIMA.—One of the best Pole Beans, matures in 90 days, seeds very large, broad and pure white. Pkt., 10c.; qt., 45c.; peck, \$2.00.

DREER'S IMPROVED LIMA.—Earlier and more prolific than Large Lima; succeeds in shorter season; beans smaller, but of extra quality. Pkt., 10c.; qt., 50c.; peck, \$2.25.

"King of the Garden" Lima.—It is a vigorous grower, requiring but two vines to each pole. When not closely planted they set their beans early, at the bottom of the pole, producing a continuous bloom and fruitage to the extreme end of the season. The pods are of enormous size, many specimens measuring from five to eight inches, and producing up to seven beans to the pod, all perfectly formed and of superior quality. Ours is genuine stock from the originator. Pkt., 10c.; qt., 60c.; peck, \$2.75.

Extra Early Jersey Lima.—About two weeks earlier than Large Lima, which is of great advantage to gardeners. Pkt., 15c.; qt., 65c.

ENGLISH BEANS.

CULTURE.—Plant early in Spring in drills 2 feet apart and 4 to 6 inches in the rows; cover about 2 inches. A strong soil suits them best. Pinch off the tops as soon as the lower pods set. They are eaten shelled.

Broad Windsor.—Best for general cultivation. Pkt., 10c.; qt., 50c.

BORECOLE or KALE.—GRUENKOHL.

CULTURE.—The Kales are excellent as greens for Winter and Spring use. The crown or centre of the head cut off so as to include the leaves is the eatable part. They are more hardy than cabbage, and are improved by frost, but the time and manner of sowing, and the culture are identical with cabbage. One ounce produces 2,000 plants or 100 yards of row.

Dwarf Green Curled.—Very hardy; should be treated like spinach. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.

Tall Green Scotch.—Finely curled; one of the best sorts. Is more tender after being touched by frost. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.

Tall Tree Kale.—Bright green; well curled, hardy. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.

SEA KALE is only usable after bleaching. The midrib is the part used. Plants started in hot beds in the Spring are fit for blanching one year earlier than seed sown early in Spring in open ground.

Sea Kale.—Shoots are cooked like Asparagus. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.00.

BRUSSELS SPROUTS.—ROSEN-KOHL.

CULTURE.—This plant is allied to the cabbage family, producing small heads from the side of the stalk, which are in perfection for use in autumn after early frosts. Sow in May, transplant in June one foot apart each way and cultivate like winter cabbage. One ounce will seed 100 yards of row.

Improved Dwarf.—A fine strain. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.

BRIDGEPORT DRUMHEAD CABBAGE.

This is the standard shipping sort from this market. The home grown ordinary seed has sold as high as \$20.00 per pound several times during the past ten years. Our local growers will have no other. Thousands of car-loads are annually used and shipped from Chicago south. It makes a large, round, firm head, which seldom bursts or rots. Since our introduction of this famous local sort to the public, five years ago, the demand each year has exceeded our supply. This great demand has induced parties to sell all grades of late cabbage as substitutes for the genuine article and being second rate seed of inferior selection, is offered at low rates. The extra value of our seed is shown from the fact that several seasons we could have sold every ounce we had to our home gardeners at our regular rates. We have the smallest supply for several years and can only offer it in sealed packets. **Per pkt., 25c.**

Eastern grown seed: Per pkt., 10c.; oz., 50c.; 1-4lb., \$1.50; lb., \$5.00.

Chana, Ogle Co., Ill.—My order last Spring was a Club order, and all parties were pleased with their Seeds. All say they never raised such Cabbage before. We think your Bridgeport Drumhead and Premium Flat Dutch are all you claim for them. I had the Chartier's Improved Radish and can say they were the best I ever raised. The Thorburn Potatoe I got of you two years ago is our favorite potato. Mrs. E. E. Hardesty.

BROCCOLI.—SPARGEL-KOHL.

CULTURE.—This plant resembles Cauliflower, but is hardier and of less delicate flavor. Sow early in May and transplant late in June or early in July to a rich, mellow bed. Cultivate as late cabbage. It thrives best in moist soil and cool temperature. One ounce will produce 2,000 plants.

Large White Mammoth.—Heads compact, large and white. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.25.

Walcheren.—One of the best sorts; white and delicate. Packet, 10c.; oz., 50c.; ¼ lb., \$1.75.

Purple Cape.—The popular sort, with large purplish heads, of a brownish-purple color and good flavor. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.25.

CARDOON.

The Cardoon resembles the Artichoke, though it is larger in size, while its flowers are smaller. It is cultivated for its blanched leaf stalks and the midrib of its leaves, which are used in salads and soups. Sow early in spring, 1½ inches deep, in rows 2 feet apart, and thin to about 12 inches in the row. Earth up like celery when of proper height.

SMOOTH LARGE SOLID.—Pkt., 5c.; oz., 15c.; ¼ lb., 50c.

CHEVIL.—KOERBEL.

CULTURE.—Sow in a deep mellow rich seed-bed in drills 9 to 12 inches apart and cover 2 inches deep with fine soil. Cultivate like parsley. The leaves are used for soups and salads. One ounce of seed will sow 100 feet of drill.

Double Curled.—Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.00.

CHICORY.—KAFFEEWURZEL.

CULTURE.—Its dried roots are used as a substitute or an ingredient of coffee. Sow in good rich soil half an inch deep and cultivate like carrots. In Fall cut the roots in pieces about an inch in length, string and dry like apples. The dried roots are roasted and ground like coffee, or the roots may be blanched for a salad. One ounce sows 100 feet of drill.

Large Rooted Magdeburgh.—Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 80c.

Large Rooted Brussels or Whitloof.—Produces a white heart, which is good boiled or as a salad. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

BEET.—ROTHE-RUEBEN.

CULTURE.—Select a rich, mellow soil, sow in Spring as early as the ground can be worked, in drills 1 foot apart and 1 inch deep; thin to 8 inches apart; for winter use sow in June. Cultivate often. One ounce of seed will sow 100 feet, 6 to 8 lbs. are required to seed an acre. Per packet of any sort, 5c.; per oz., 10c.

Egyptian.—Finest early market sort; very deep red, tender and sweet, in form like the Flat Dutch Turnips. $\frac{1}{4}$ lb., 20c.; lb., 60c.

Eclipse.—A very early, smooth, globe-shaped beet, with small top and thin root; its skin an intense deep red, its flesh of very fine texture, earliness and quality it is excelled by none. Many of our Market Gardeners prefer it, even to the old standard variety, the Egyptian. $\frac{1}{4}$ lb., 25c.; lb., 80c.

Early Blood Turnip.—For Summer and Winter use. $\frac{1}{4}$ lb., 15c.; lb., 50c.

Edmonds.—See novelties.

DEWING'S EARLY BLOOD TURNIP.

—A week earlier than Blood Turnip; shape good, skin smooth, good for Summer and Winter use. Our stock is grown from specially selected roots. Excellent for the table. $\frac{1}{4}$ lb., 20c.; lb., 65c.

Early Flat Red Bassano.—Very early, turnip shaped. $\frac{1}{4}$ lb., 20c.; lb., 60c.

Long Smooth Dark Blood.—A well known Winter sort. $\frac{1}{4}$ lb., 20c.; lb., 60c.

Round Yellow.— $\frac{1}{4}$ lb., 20c.; lb., 60c.

Bastian's Blood Turnip.—Very early, extremely quick grower, sweet, not so dark as some varieties, but a great favorite in Eastern markets, owing to its fine flavor. $\frac{1}{4}$ lb., 20c.; lb., 65c.

Pyriform Strassburg.—Flesh fine and sweet, very deep red. $\frac{1}{4}$ lb., 20c.; lb., 60c.

SWISS CHARD, Silver or Sea Kale Beet.—This variety is cultivated for its leaves only, being used as Spinach; cooked like Asparagus. $\frac{1}{4}$ lb., 20c.; lb., 60c.

BEET, MANGEL WURZEL.

(RUNKEL RUEBEN).

The importance and value of this crop to all stock farmers cannot be overestimated, and is fully realized and acted on by very few farmers. When the fact is considered that 50 tons of Mangel Wurzel may be grown on a single acre, thus providing fresh and healthful stock food for the winter at so small an outlay, the wonder is that every farmer does not profit by it. (See also carrots, Belgian, white and orange, on following pages.) Read what some of our customers say of our Mangel seed. We carry a very large stock of Mangel seed, and can sell the largest buyers.

Write for estimates on larger quantities.

CULTURE.—Sow in April and May in thoroughly ploughed, well manured soil, in drills 2 inches deep and about 18 inches apart. Thin out to 12 inches, and keep the weeds down by frequent hoeing and cultivating. 4 to 6 pounds are required per acre. For further information, see our BOOK LIST.

Per ounce of any kind, 5c.

VAUGHAN'S IMPROVED MAMMOTH LONG RED.—This is an enormously productive variety, yielding 50 to 60 tons to the single acre. We have an improved strain not to be compared to inferior strains offered at lower rates. $\frac{1}{4}$ lb., 15c.; lb., 40c. 10 lbs., \$3.25.

Norblon Giant.—Large; small tops, one of the best long red varieties. $\frac{1}{4}$ lb., 15c.; lb., 35c.; 10 lbs., \$3.00.

Kinver's New Mangel.—A new English strain of Yellow Globe; skin fine bright orange color, of superb quality and an immense cropper. $\frac{1}{4}$ lb., 15c.; lb., 40c.; 10 lbs., \$2.50.

MANGEL WURZEL—Continued.

ORANGE GLOBE.—Very nutritious and productive; good keeper. $\frac{1}{4}$ lb., 15c.; lb., 35c.; 10 lbs., \$2.50.

Red Globe.—Differs from above in color; adapted to shallow soil. $\frac{1}{4}$ lb., 15c.; lb., 40c.; 10 lbs., \$2.50.

Long Negro Mangel.—Grows well above ground; flesh dark red. $\frac{1}{4}$ lb., 15c.; lb., 40c.

GOLDEN TANKARD.—The best Yellow Mangel in cultivation. Skin and flesh deep rich yellow, of handsome, almost cylindrical shape. It is a heavy cropper, and the flesh is rich in saccharine matter, and it takes the lead over all others in England, where it has yielded at the rate of over 70 tons to the acre. $\frac{1}{4}$ lb., 15c.; lb., 45c.; 10 lbs., \$3.00.

New Red-Fleshed Tankard.—In shape like above, but is a larger yielder and contains a greater percentage of saccharine matter. $\frac{1}{4}$ lb., 15c.; lb., 45c.

SUGAR BEETS.—ZUCKER RUNKEL RUEBEN.

Sugar Beets are not as heavy yielders as the foregoing, but are of superior quality, containing a larger amount of saccharine matter. Thousands of acres are planted with Sugar Beets in Europe for the manufacture of sugar, and thousands of pounds of seed have been distributed among Southern farmers last year for the same purpose. They are excellent for feeding cows, improving wonderfully the quantity and also the quality of the milk.

Vilmorin's Imperial White Sugar.—An improved French variety exceeding all others in percentage of sugar; well liked wherever tried. Oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 85c.

Lane's Improved Sugar.—An improved variety of Sugar Beet, hardy, white, very productive and sweet. $\frac{1}{4}$ lb., 15c.; lb., 40c.; 10 lbs., \$3.00.

White Sugar.—One of the best White Sugar Beets. $\frac{1}{4}$ lb., 15c.; lb., 40c.; 10 lbs., \$3.00.

MANGEL WURZEL, LARGE YELLOW

OBERNDORF.—The most popular sort in Germany, the roots, which grow to a large size are rounded on top and flattened underneath, almost entirely over ground, and resting on the surface, these qualities make it a very profitable kind on shallow soils and easy to gather. It is a heavy cropper and much relished by cattle. $\frac{1}{4}$ lb., 20c.; lb., 50c.

The prices for single lbs. and less include postage and express charges. Larger lots go at purchaser's expense.

EARLY BLOOD TURNIP BEET.

ECLIPSE BEET.

EGYPTIAN BEET.

ORANGE GLOBE.

GOLDEN TANKARD MANGEL.

Pullman Farm, Pullman, Ills.
—Your seeds have given entire satisfaction, and have proved true to name in every instance.
E. T. Martin, Supt.

CABBAGE. (KOPF-KOHL.)

The prices below include prepayment by mail.

FOR CABBAGE PLANTS, SEE END OF VEGETABLE SEED LIST.

CULTURE.—The requirements for a good crop are rich soil, deep plowing, high manuring, GOOD SEED and thorough after culture. At the South a fall planting of seed and a removal of the young plants to cold frames for the winter is frequently resorted to, to secure a very early crop, but throughout the Northern latitudes a sowing of seed in January or February in hot-beds, and a transplanting in late April or early May to open ground, or an early sowing in open ground is the custom. Set the plants in rows two feet apart, and 12 to 18 inches apart in the row. A dusting of plaster or air-slaked lime, or a handful of ashes thrown upon the plants as they appear above the ground will help prevent the attack of the cabbage fly. For second early, sow in April and transplant in May. For late crop sow in May and transplant in July, setting the plant in rows 3 feet apart, and 2 feet apart in the rows. Thin out to one plant in each hill. One ounce will produce about 2,000 plants and sow an area of 40 square feet. Our seed is grown from selected heads and saved from centre shoots. The purchase of cheap cabbage seed is the poorest investment in the world; the failure can never be known until an entire season's labor and outlay is lost.

Lowell, Ind., Nov. 7th, '88.—The seed we bought of you last season gave the best satisfaction of any we ever had, especially the specialties. They all grew well and produced good crops. The plants were extra nice.
Mrs. G. F. Sutton.

FOTTLER'S IMPROVED BRUNSWICK.

ALL SEASONS CABBAGE.

Extra Early Paris Savoy.—This is the earliest Savoy of good size, with solid heads beautifully crimped. Pkt., 10c.; oz., 35c.

Small Early Elm Savoy.—Oz., 25c.; ¼ lb., 75c.

Marvin's Savoy.—This very distinct and uniform Savoy originated in a Long Island family, who have followed the trucking business for a century. The Cabbage is not only very large and solid but very curly, and will give 90 to 95 per cent. of good heads in every field. Pkt., 15c.; oz., \$1.00.

IMPROVED AMERICAN SAVOY.—Best late Savoy. Oz., 30c.; ¼ lb., \$1.00; lb., \$3.75.

RED DRUMHEAD.

NEW EXPRESS.

Price per Packet, 5 cents except where noted.

Early Etampes.—Pointed, small; known as "Earliest." Oz., 25c.; ¼ lb., 75c.; lb., \$2.25.

EXTRA EARLY EXPRESS.—France is undoubtedly in the front rank in producing many garden seeds, and certainly so in the matter of early cabbage. The New "EXPRESS" is from 8 to 10 days ahead of the Early Etampes, which it resembles in shape, though smaller. It has few outside leaves, and can be planted close. For a very quick forcing sort, try it. Oz., 30c.; ¼ lb., 90c.; lb., \$3.25.

SELECT EARLY JERSEY WAKEFIELD.—The best early sort in cultivation; forms fine solid heads of good size, conical in shape, with very few outside leaves, and of the best quality. We offer this as the earliest strain of this standard variety. Grown only from selected heads. Remarkably pure, and warranted to give satisfaction. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.00; lb., \$3.50.

EARLY JERSEY WAKEFIELD.—Like above, but not quite so carefully selected. Oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

LARGE JERSEY WAKEFIELD.—Larger, and a trifle later than the above sort. Heads hard, solid and uniform in quality. Oz., 25c.; ¼ lb., 90c.; lb., \$3.00.

Cox's Early Spring.—Pkt., 10c.; oz., 30c.

Early York.—Small early, roundish oval. Oz., 15c.; ¼ lb., 40c.

HENDERSON'S EARLY SUMMER.—Matures between Wakefield and Fottler's, and unlike early sorts, rarely or never bursts. Our seed is from Henderson. Oz., 30c.; ¼ lb., \$1.25; lb., \$3.50.

Early Winnigstadt.—Sure to head on all soils. A great favorite with the Germans. Oz., 20c.; ¼ lb., 40c.; lb., \$1.50.

All Seasons.—Nearly or quite as early as Early Summer; heads harder and larger. Comes about two weeks earlier than Fottler's, and is as good for late market or winter use as for early. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

Vaughan's Market Gardeners' and CASSEL.—See Novelties.

Early Deep Head.—An excellent new second early, thicker and rounder than Fottler's. Very good for market gardeners. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.75.

FOTTLER'S IMPROVED BRUNSWICK DRUMHEAD.—Ours is pure stock; best Massachusetts grown seed. Best early Drumhead. Stem small and short, head large, every plant sure to head. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

FOTTLER'S BRUNSWICK.—(Blue Fottler's). Bluish leaves; preferred by many Chicago gardeners; very free from rot. Pkt., 5c.; oz., 25c.; ¼ lb., 85c.; lb., \$2.75.

St. John's Day Early Drumhead.—Oz., 25c.; ¼ lb., 75c.

Filderkraut.—A German favorite. Oz., 15c.; ¼ lb., 50c.

Denmark Drumhead.—Forms large, round and solid heads of very uniform size. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.00; lb., \$3.50.

Stone Mason.—A large, solid, late Drumhead, much used in Boston. Ours is from the best Mass. grower. Pkt., 10c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.50.

Marblehead Mammoth Drumhead.—Late; the largest cabbage grown. Pkt., 10c.; oz., 50c.; ¼ lb., \$1.50; lb., \$5.00.

Louisville Drumhead.—The Louisville gardeners have, by local selection for several years, secured a very fine shipping Cabbage which they prefer to all others. We secured a local strain of the variety which is in great favor at home. Pkt., 10c.; oz., 60c.; ¼ lb., \$2.00.

Large Late American Drumhead.—An excellent, specially selected strain of this standard variety for the main crop. Oz., 25c.; ¼ lb., 75c.; lb., \$2.60.

Luxemburg.—See Novelties. Pkt., 10c.; oz., 75c.; ¼ lb., \$2.50.

Warren's Improved.—Pkt., 10c.; oz., 40c.; ¼ lb., \$1.25; lb., \$4.50.

PREMIUM FLAT DUTCH.—No cabbage is so universally grown as this, and for the reason that the seed may be sown in the open ground and the young plants started without the use of hot-beds—hence it is the favorite with all people for general use. We have, therefore, sought for the finest possible selection of it, and believe that in our seed of this we have a strain that in reliability for heading, evenness of crop and size cannot be surpassed. Do not be deceived by fancy names, but buy our seed under the plain old title of PREMIUM FLAT DUTCH, and you will get a first-class article. Oz., 20c.; ¼ lb., 75c.; lb., \$2.50.

BUCKS COUNTY FLAT DUTCH.—This is a favorite late cabbage in the Philadelphia markets. Oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Hyde Park.—A variety largely raised on Long Island, greatly improved by careful selection. It is an excellent keeper, of large size, flat, very deep, short stemmed and not apt to burst. Pkt., 10c.; oz., 50c.; lb., \$5.00.

Extra Early Dark Red Erfurt.—Said to be the earliest and finest red. Pkt., 10c.; oz., 30c.; ¼ lb., 85c.; lb., \$3.00.

Dark Red Dutch.—Heads hard, oblong and of medium size. Oz., 15c.; ¼ lb., 40c.; lb., \$1.50.

Red Drumhead.—The best. Pkt., 10c.; oz., 30c.; ¼ lb., 90c.; lb., \$3.00.

Nashville, Tenn., Oct., 31st, '88.—Sister Catherine who has charge of the Green House, says: "You keep the best seeds and bulbs of any one she ever dealt with."
Mother Rose, St. Cecilia Convent

Please remember that \$5.00 buy seeds in packets amounting to \$6.50.

CARROT.—MEHREN ODER GELBE RUBEN.

Evenness in type, color and form are most desirable, yet seldom attained in the Carrot. Our seed is mostly grown from French stock which is the purest we know of.

The numbers following the names, refer to the illustrations on Photo-plate, which was made direct from specimens grown from our seed.

Packets of any Variety, 5c.; oz., 10c.; except where noted.

THE PRICES BELOW INCLUDE PREPAYMENT BY MAIL.

CULTURE.—A light sandy loam, well tilled, and manured the previous year best suits the carrot. For early crop sow as early as the ground can be worked, in drills 10 inches apart, and thin to 5 inches in the rows. The French Horn, owing to its extreme earliness, is used for hot-bed culture. The late sorts, long and half long varieties (main crop), sow from middle of May until first of July in drills 12 to 14 inches apart. Thin out to 6 and 7 inches in the row. Keep the hoe at work. One ounce of seed sows 50 feet of row.

Very Early Scarlet.—(1.) (French Horn). For forcing, earliest and smallest; nearly round; two inches in diameter; fine quality. $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Early Short Scarlet (Dutch Horn).—Stump-rooted; second in size; fine for forcing; rich color, and very pleasant flavor. $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Guerande Half Long.—(3.) Stump rooted; new thick carrot of fine color; longer and much thicker than Early Short Scarlet. Also called "Ox Heart." One of the finest for table use and most profitable for the market. Oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Half Long Stump-Rooted.—(2.) (Short Horn). A standard early sort, medium in length; a very profitable sort for market gardeners. $\frac{1}{4}$ lb., 25c.; lb., 75c.

Nantes Early Half Long Scarlet.—Improved stump-rooted Horn; sweet, of very fine grain; excellent for the home garden and market. $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Early Half Long Luc.—Thick; good sized. $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Half Long Scarlet Carentan.—Very handsome carrot, about 8 inches long, stump-rooted and almost without a core. $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

CHANTENAY.—(4.) One of the most perfect and uniform in shape, smooth, heavy yielder and of fine table quality. $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

DANVERS (Selected Stock).—(6.) We have an extra fine strain of seed of this favorite sort, which we have sold for several years with the greatest satisfaction to our customers; we pay one-third more for our stock of this variety than the usual wholesale market price. Oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.25.

Improved Long Orange.—(7.) A standard late variety; handsome and uniform in shape; deep orange color; good flavor; yields heavily. It increases the flow of milk and improves its quality. $\frac{1}{4}$ lb., 20c.; lb., 75c.

Long Red, without Core.—Stump-rooted; 12 to 16 inches long, 2 to 3 inches in diameter; good quality, and of excellent color. For table use and market this is one of the best long scarlet carrots. $\frac{1}{4}$ lb., 20c.; lb., 65c.

JAMES' INTERMEDIATE.—(5.) An excellent new English sort, valuable as a bunching variety. It is smooth, and near the Danvers in size, its color is a clear, bright red, its flesh very close in texture and almost without core; an enormous yielder. $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Red St. Valery.—This carrot is now one of the most popular varieties in France, where it originated. It is of a rich, deep orange color; large and of handsome appearance, grows very straight and about 12 inches long. $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Long Scarlet Altringham.—For table and stock. $\frac{1}{4}$ lb., 20c.; lb., 70c.

Orange Belgian, Large.— $\frac{1}{4}$ lb., 20c.; lb., 60c.

Long White Green Top Belgian.— $\frac{1}{4}$ lb., 20c.; lb., 60c.

The last two varieties are largely grown in Europe for feeding stock, especially horses, by whom they are much relished. They grow about 20 inches long, are enormously productive, keep well and are considered very nutritious.

Minonk, Ill., October, '88.—The Chantenay and James' Intermediate carrot seed I purchased of you this spring has yielded the finest carrots I ever saw.

John Meierhofer.

Richmond, Ill., Oct. 26, '88.—Extra Early Erfurt Cauliflower is the best that grows for this county. Nice plump heads and very early. The best for market.

J. S. Randall.

See Book list on page 88 for Treatise on MANGELS, CARROTS, ETC. See also other SEEDS FOR STOCK FOOD offered on another page.

VAUGHAN'S
STANDARD
CARROTS

CAULIFLOWER.—BLUMEN-KOHL.

FOR PLANTS OF CAULIFLOWER, CABBAGE, ETC., SEE END OF VEGETABLE SEED LIST.

CULTURE.—Cauliflower ought to receive a similar treatment to Cabbage, except that it requires an extra rich soil, an occasional application of liquid manure and frequent watering, especially when heading. Early sorts in this latitude are mostly sown in January or February in hot-bed, transplanted once before setting in open ground, and finally transplanted before the middle of April in rich deeply-worked soil 2 feet by 15 inches apart. Late sorts are sown and cultivated like late cabbage. When heading tie the top leaves together to protect from exposure to the sun. $\frac{1}{2}$ oz. of seed sows 100 yards of row and gives about 2,000 plants.

No seed is more important than this as every gardener knows. It is one of the seeds in buying which price should never be questioned.

VAUGHAN'S EARLIEST DWARF ERFURT.—TITRE.

The very best for forcing and earliest in open ground and equally profitable for late planting. We offer a very choice strain, imported by us direct from one of the most reliable Erfurt growers. This has given universal satisfaction with our customers, as also has our "Extra Early Erfurt." Pkt., 50c.; $\frac{1}{4}$ oz., \$2.00; oz., \$7.00.

EXTRA EARLY ERFURT.—Very dwarf. We recommend our strain of this variety as superior to the Early Snowball and at lower price. Our Market Gardeners are highly pleased with it. Pkt., 15c.; $\frac{1}{4}$ oz., \$1.00; oz., \$3.50.

EARLY SNOWBALL.—We offer to our customers throughout the West genuine Henderson's stock, in his sealed packages. It will save much time to those who have formerly bought it in New York. Undoubtedly one of the best early sorts. Pkt., 15c.; $\frac{1}{4}$ oz., \$1.00; oz., \$4.00.

Snowball will do well for early and late using out of same package.

Thorburn's Gilt Edge.—Pkt., 50c.; oz., \$3.50.

Ferry's Early Puritan.—Pkt., 30c.; oz., \$5.00.

EXTRA EARLY PARIS.—Good for forcing, a standard early variety. Pkt., 10c.; oz., 75c.

Half Early Paris.—Largest for forcing, early. Pkt., 10c.; oz., 75c.

Lenormand's Short Stem Mammoth.—Produces large, fine heads of good substance. Pkt., 10c.; oz., 75c.

Walcheren.—A late hardy sort, large white compact head. Pkt., 10c.; oz., 75c.

Autumn Giant.—Heads large, compact and very white, well protected by the foliage. Pkt., 10c.; oz., 75c.

Algiers.—One of the largest and best for late use; forms large, solid and very white heads; is sure to head. Pkt., 10c.; oz., 75c.

Dakota, Ills., Oct. 22nd, '88.—I have been selling seeds and potatoes for some years and I think your seeds will sell ahead of all others, as the packets are more liberal than any others I have seen or sold. Mr. R. J. Spangler.

THE REAL VALUE of seeds is best known when the crop is harvested; the figures given in the catalogues of various seedsmen being often an uncertain estimate. We believe the product of our seeds will show our prices to represent their ACTUAL WORTH.

• VAUGHAN'S • STANDARD • SWEET • CORN. •

For BUSHEL RATES See our Special Price List for Market Gardeners which we will mail on application.

At the rates mentioned we prepay all Packets, Pints and Quarts. If wanted to go at buyer's expense, 10 cents per quart may be deducted.

Prices on Pecks and Bushels do not include pre-payment.

CULTURE.—Choose for a field of Sweet Corn, a good rich soil and a warm exposure. Make the first planting about May 1st, and sow every two weeks thereafter until the middle of July for succession. Plant in hills three or four feet apart according to size of variety or strength of soil, or in drills 3 feet apart, and 8 inches apart in the drill. Cultivate often and thoroughly. One quart of seed plants 100 yards of row.

Price, for all kinds, except marked otherwise, Pkt., 10c.; Pint, 15c.; Qt., 30c. Not Prepaid, Peck, \$1.00; Bu., \$3.50.

NORTHERN PEDIGREE.—This kind has proved to be from 2 to 6 days earlier than Cory, is sweet, rich and very tender and has very compact and well-formed ears. Pkt., 10c.; pt. 20c.; qt. 35c.; peck, \$1.75.

BURBANK'S EARLY.—From Maine, early, white, good size; see novelties. Pkt., 10c.; pint, 25c.; qt., 45c.; peck, \$1.50.

GOLD COIN.—See novelties. Pkt. 20c.; 3 pkts. 50c.; 7 pkts. \$1.00; 12 pkts. \$1.75

RUBY.—See novelties. Per pkt., 15c.

CORY.—One of the earliest marketable sweet corns we are acquainted with. Pkt. 10c.; qt., 30c.; peck, \$1.25; bush., \$4.50.

Marblehead Early.—Larger than the Cory and a little later; it is a good early sort for the home garden, and market gardeners.

FORD'S EARLY.—Early as Marblehead, quality excellent. We think highly of it. Pkt. 10c.; qt., 35c.; peck, \$1.25; bush., \$4.50.

Adams' Early.—Not sweet, but very early.

Chicago Market.—(Also called Ballard's). Smaller than Perry's Hybrid, but about the same in season. The genuine is of good table quality.

Early Narragansett.—Very early, slightly reddish.

EARLY MINNESOTA.—An old favorite, and quite early. Our selection of this shows larger ears than most other strains.

PERRY'S HYBRID.—Best large second early for market, nearly as early as Minnesota, white, sweet, tender and large. Our stock for 1889 is grown and selected by Mr. Perry himself. Pkt. 10c.; pint, 20c.; qt. 35c. Not prepaid, peck, \$1.15; bush., \$4.25.

Crosby's Early.—A little later than Early Minnesota.

MOORE'S EARLY CONCORD.—A good second early. Many of our Chicago gardeners plant it as late as July 1st, as the ears will sell about as well as Stowell's Evergreen.

PEE AND KAY.—About as early as Perry's Hybrid; very white, tender and sweet, and as large as a medium-sized ear of Stowell's Evergreen. This corn will give satisfaction in all markets for size, earliness, quality and color.

Hickox Improved Sugar.—A very good medium early.

Eight Rowed Sugar.—About five days later than Crosby's.

Black Mexican.—One of the very sweetest. Some of our customers will have no other for the home garden.

Early Mammoth.—Like the Late Mammoth, but much earlier.

Asylum Sugar.—A good late sort, large.

LATE MAMMOTH SUGAR.—Very large ears and very sweet.

Livingston's Evergreen.—Later than Moore's, earlier than Stowell's. Quality first-class; good for market. Pkt. 10c.; qt., 35c.; peck, \$1.00.

OLD COLONY.—A new selection of the Evergreen type, but about ten days earlier, which has come into high favor with our customers the past seasons. Mr. E. B. Clark, who originated and named this sort, is probably the largest grower of Sweet Corn in the world, and believes the Old Colony is the best late sort for all purposes. Our stock of this sort was all grown by him, this year, and we have the only stock of his seed in Chicago. The ear, when ready for market, can hardly be distinguished from the Evergreen, and is ready ten days earlier. We think it is sure to supplant that variety as it becomes more widely known. Pkt. 10c.; qt. 35c.; pk. \$1.25; bu. \$4.25.

POTTER'S EXCELSIOR.—One of the best medium early sorts.

STOWELL'S EVERGREEN.—The standard late sort. We have an extra fine, pure strain of this most popular kind. It is carefully grown, and we cannot compete in prices with the cheap field crops of this sort, so frequently thrown on the market by inexperienced growers. We can make, however, lower prices on large lots, and shall be glad to send sample to any one wishing to purchase in quantity. Qt., 25c.; peck, 55c.; bush., \$3.25.

EGYPTIAN.—Very sweet; good for canning.

Triumph.—Productive; a week earlier than Evergreen.

Sweet Fodder Corn.—For a supply of green fodder in the Summer sow this corn broadcast. Qt., 20c.; peck, 65c.; bush., \$2.00.

FIELD AND POP CORN.—See descriptions on other pages.

CORN SALAD.—ACKER-SALAT.

CULTURE.—A small salad. Sow in Spring in drills one foot apart. Keep clean from weeds. It will mature in six to eight weeks. For early Spring use, sow in September, thickly in drills 1½ inch deep. Tread the ground if dry weather. Protect with litter when cold weather comes and winter over like spinach. One ounce will sow thirty-five feet of row.

Large Round Leaved.—Finest sort. Pkt. 5c.; oz. 10c.; ¼ lb. 25c.; lb. 70c.

DANDELION (LOEWENZAHN).

CULTURE.—The Dandelion is cultivated for early spring greens, or is blanched for salad, while its roots dried and roasted have use as a substitute for coffee. Sow the seed early in Spring in drills 1½ inch deep and 12 inches apart; thinning later to 6 inches in the drills; protect with litter through the severe winter weather. The following Spring it is ready for use. One ounce will sow 100 feet of drill.

Thick Leaved or Cabbaging.—An improvement on the common sort, the leaves being fully double the size. Pkt., 10c.; oz., 60c.

Improved, Very Early.—Especially fine for forcing. Pkt., 10c.; oz., 75c.

CELERY—SELLERIE.

[FOR CELERY, PEPPER AND TOMATO PLANTS. SEE END OF VEGETABLE SEED LIST.]

Chicago is one of the largest Celery markets in the world, and our strains for Market Gardeners' use are unexcelled.

CULTURE.—Sow the seed late in March or early in April on fine well-worked soil. Cover lightly, or better still, roll or press it in. Shade the young plants for a week or ten days, and do not let the soil dry out. Cut them once or twice before setting out, to make them stocky. When from 4 to 6 inches high transplant into broad shallow trenches, or to level ground, setting dwarf sorts into rows 3 feet apart, and tall sorts 4 feet apart, 6 inches apart in the rows. Set out every two or three weeks for a succession. The soil chosen should be light, highly manured, partially shaded and moist, or near water, as the plants must be freely watered in dry weather. Earthing up checks growth, and should not begin until the plants are quite well grown; then earth up gradually, keeping the leaf stalks close together so that the soil may not fall into the centre of the plant, but never earth up in wet weather, nor when dew is on the plants. The plants intended for Winter and Spring use need not be bleached until laid up. For winter storage dig in well drained soil a trench 1 foot wide and as deep as the height of the celery. To this remove the stalks with roots attached. Set them upright, closely packed, but not crowded. Cover with boards to protect from rain, and later with straw and leaves to protect from severe cold. One ounce of seed produces 7,000 plants. A clever method of tile blanching has been devised which is a saving of time, labor and space, with only the first cost of the tile as an offset. At the time of earthing up cover each plant in alternate rows with a section of 3 inch tile, drawing up enough earth to firm it. The stalks will come out clear white, crisp and tender, without dirt or rust. These rows can be two feet apart, and then afford enough earth to bank up the alternate rows, or it can be stored for winter use.

Per Packet, 5 Cents, except where noted.

GIANT GOLDEN HEART.—See novelties.

Pkt. 10c.; oz. 60c.; lb. \$7.00.

DWARF GOLDEN HEART.—The most popular variety of all. Its handsome color, medium size and fine flavor render it the leading sort both for home and market use. It is one of the best keepers through the winter. This sort is raised almost exclusively in Kalamazoo, Mich., where hundreds of acres are devoted to Celery culture. Oz. 30c.; ¼ lb. 75c.; lb. \$2.50.

Early Arlington.—An extra early strain of Boston Market, somewhat large, free from blight, and not inclined to run to seed; blanches easily and is a strong grower. Pkt. 10c.; oz. 50c.; ¼ lb. \$1.50; lb. \$5.00.

BOSTON MARKET.—This variety, though quite dwarf and very branching, is regarded as possessing the finest table qualities; none has been more popular for home use, though for market the larger and more showy sorts are often preferred. It is a good keeper. Oz. 25c.; ¼ lb. 75c.; lb. \$2.50.

PERFECTION HEARTWELL.—A strong grower; solid, never hollow and an excellent keeper. One of the best market sorts. This sort is extensively raised for the Chicago Market. Our strain is very fine. Pkt. 10c.; oz. 50c.; ¼ lb. \$1.50; lb. \$5.00.

NEW IVORY SOLID.—See novelties. Pkt. 10c.; oz. 50c.; lb. \$5.00.

GOLDEN SELF-BLANCHING.—This handsome variety of recent introduction has proven so popular that for the past three years seed could not be supplied to meet the enormous demand even at three times ordinary prices. The plant is of very handsome appearance, very close habit and compact growth. The large heart is of a beautiful golden yellow, and even the outer stalks are of a yellowish white color without any banking or coloring whatever. The ribs are perfectly solid, crisp and of the finest flavor. It is an excellent keeper. OUR SPECIAL STOCK of this, similar to that photographed, has always been a most desirable strain; we regret however to say that some of the seed we sold last year, showed a mixture of green sorts. If all who had such will report same to us, stating amount bought by them last year, we will replace free of charge this season. We believe the new seed, now in store, to be genuine. Pkt. 10c.; oz. 45c.; ¼ lb. \$1.50.

HENDERSON'S WHITE PLUME.—A handsome, crisp sort of very easy cultivation, as it is almost self-blanching, requiring for this purpose but a single hoeing-up of the earth about the stalks. As the flavor is excellent, and the appearance very ornamental, it is one of the best varieties for family use and market. Pkt. 10c.; oz. 40c.; ¼ lb. \$1.25; lb. \$4.50.

Crawford's Half Dwarf.—It stands very high among the Chicago market men; probably second to none; it is seldom hollow, rich flavor, and of vigorous growth. Oz. 25c.; ¼ lb. 75c.; lb. \$3.00.

White Solid.—A standard tall sort, of stiff, close growth. Oz. 25c.; ¼ lb. 75c.; lb. \$2.25.

NEW ROSE.—The red and pink celeries have been deservedly gaining in popular favor for several years past, both because they are harder and better keepers than the yellow and white sorts, and because of their superior flavor and crispness. This new sort combines with the above fine qualities, a handsome appearance which renders it a most attractive ornament to the dinner table, the heart and stems being beautifully shaded to a fine rose color. Pkt. 5c.; oz. 35c.; ¼ lb. \$1.25.

Red Giant Solid.—The largest of red varieties. Oz. 25c.

Carter's Crimson.—Dark solid, crisp, fine for table decoration. Oz. 25c.

Old Celery Seed.—Used for flavoring. Oz. 5c.; ¼ lb. 15c.; lb. 40c.

CELERIAC.—KNOLLEN-SELLERIE.

CULTURE.—Sow early in Spring. Transplant in May into rich mellow soil in rows 18 inches apart and 6 inches in the row. Water in dry weather. Little or no earthing-up is required. The turnip-shaped roots for which this is grown are ready in October and are used in soups and as a salad. One ounce will sow fifty feet of row.

Turnip Rooted.—Roots when cooked and sliced and used with vinegar and oil make a delicious salad. Pkt. 5c.; oz. 15c.; ¼ lb. 40c.; lb. \$1.25.

Turnip Rooted, Apple Shaped.—New, large tubers, almost round and quite smooth. Pkt. 5c.; oz. 25c.; ¼ lb. 75c.; lb. \$2.25.

LARGE SMOOTH PRAGUE.—Short-leaved very smooth sort, the best. Pkt. 5c.; oz. 25c.; ¼ lb. 75c.; lb. \$2.50.

VAUGHAN'S CELERY MANUAL.

A complete guide to all operations connected with the business of cultivating, harvesting and storing the crops. It embraces the questions of Soils, Fertilizers, Varieties, Double Cropping, Shipping, etc., etc. By a grower of 20 years experience, revised and published by J. C. Vaughan; 50 pages postpaid 50 cents. This work which will be ready in January, 1889, will be sent free when requested with every Celery Seed order amounting to \$3.00 or upwards, or with any general order for other seeds, at catalogue rates, amounting to \$5.00 or upwards.

Should you receive two copies of this catalogue, we trust you will consider one of them a worthy present for a seed-buying friend.

Milwaukee, Wis. Nov. 26, '88.---
Your Giant Golden Heart Celery was excellent, the same with Perfection Heartwell. Chicago Pickle Cucumber is all right.
S. Newman.

CELERY GROWER.

A new, carefully prepared fertilizer especially suited to this crop, which demands high fertilizing. Price, 50 lbs. \$1.25; 100 lbs. \$2.00; 200 lbs. \$3.50.

GOLDEN SELF-BLANCHING CELERY.

PERFECTION HEARTWELL.

Comparing prices please remember that our prices for lbs. include prepayment by mail.

NEW PRAGUE CELERIAC.

Western Buyers should remember the LOW FREIGHT RATES from CHICAGO.

The prairies of the West are known by all seedsmen as the best adapted for the growth of such vine seeds as the cucumber, melon, squash, pumpkin, etc., not alone on account of purity through convenience in isolating the different varieties, but for their rank growth and large yield on the rich natural soil. Our Chicago Pickle Cucumber and Chicago Market Melon have become celebrated throughout the Union. The general list of cucumber seeds given below includes all the best varieties known.

CULTURE.—For early use sow in hot-houses on small sods overturned, or in small pots plunged in earth. As soon as danger from frost is over, transplant with sod, so as not to disturb the plants, into hills in the open ground. For general crop sow from about the first to the middle of May in rich, mellow, warm soil. Use a shovel-full of well-rotted manure in each hill and cover it 2 inches deep with fine earth. On this sow the seed, about 8 or 10 seed to a hill; cover $\frac{1}{2}$ inch with earth and press down. When danger from bugs is past thin out to four plants to a hill. For pickles plant from June to middle of July. Always pick the fruit when ready even if not needed, since, otherwise the productiveness of the vines is destroyed. One ounce of seed will plant about fifty hills.

Use Slug Shot for the Bugs.

Per Packet, 5 Cents, except where noted.

IMPROVED WHITE SPINE.—Great bearer and an excellent table sort. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 75c.

Peerless White Spine.—Earliest strain of White Spine; of good size, straight and always well-formed; deep green, holding its color until mature. Ounce, 10c.; $\frac{1}{4}$ lb., 25c.; lb., 90c.

Extra Long White Spine.—Longer than the above, of fine quality for family use. When about five inches long makes a good pickle. Oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

ARLINGTON WHITE SPINE.

ARLINGTON WHITE SPINE.—A remarkably fine strain, growing very even in size and regular in form. It is especially recommended to market gardeners, from the fact that the first set on the vines is unusually even in form and size, and continue so through the season; retains its color longer than any other. This variety brings a higher price per dozen, early in the season, both in the New York and Boston markets, than could be obtained for the Southern-grown by the crate. Oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb. 1.25.

EARLY FRAME.—Early, short, prolific. A principal pickling sort, very largely used for growing pickles near Chicago. Oz. 10c.; $\frac{1}{4}$ lb. 20c.; lb. 75c.

GREEN PROLIFIC.—Great bearer. Is certainly one of the finest for pickles. Oz. 10c.; $\frac{1}{4}$ lb., 20c.; lb., 75c.

Boston Pickling.—Short, bright green. A good pickling sort. Oz. 10c.; $\frac{1}{4}$ lb., 20c.; lb., 75c.

Early White Japan.—Creamy white. Ounce, 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Tailby's Hybrid.—Large, remarkably smooth, handsome, prolific and hardy, and of good flavor. Rural New-Yorker says it is the finest for cucumbers. Ounce, 10c.; $\frac{1}{4}$ lb., 30c.; lb. 90c.

Early Cluster.—Very early, short, prickly, great bearer; bearing in cluster near the root. Oz. 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

LONG GREEN.—A standard late sort, crisp and tender. Ounce, 10c.; $\frac{1}{4}$ lb., 25c.; lb., \$1.00.

Athens or Grecian.—Extra sort for table use, long and green, few seeds. Ounce, 15c.

Small West India Gherkin.—Small and prickly. Used only for pickling. Pkt., 10c.; oz., 20c.

Early Netted Russian.—Prolific; handsomely netted. Oz., 10c.; $\frac{1}{4}$ lb., 30c.

IMPROVED CHICAGO PICKLE.—See Novelties. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.00.

Nichols' Medium Green.—The introducer says it is not only one of the best for pickling, but none is better for forcing or slicing. ALWAYS STRAIGHT AND SMOOTH. In length it is between White Spine and Long Green. Oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

New Giant Pera.—Recommended as being the largest Long Green Cucumber in cultivation. Skin perfectly free from spines, flesh clear, crisp and white. Pkt., 10c.

CRESS or PEPPER GRASS—GARTEN-KRESSE.

CULTURE.—Sow thickly in early Spring in drills one foot apart, and follow every two weeks with a new sowing, as it quickly runs to seed. Water Cress should be sown along the margins of ditches, ponds, or better still, of slow running streams. It requires no care except to free it at first from weeds. One ounce sows 100 feet of drill.

Curled Garden.—Standard sort. May be cut two or three times. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Water Cress, (WASSER KRESSE).—Stalks and leaves have a pleasant pungent taste. Used as a salad. Pkt., 10c.

UPLAND CRESS.

New Upland Cress.—It has the identical and highly prized flavor of the Water Cress; It is so hardy as to be green nearly the whole year and starts into growth and is ready for use before any other salad in the Spring. Can be eaten like lettuce or boiled as spinach. It is, doubtless, one of the best new and distinct vegetables of its class that has been offered for some years. Price, pkt., 10c.; 3 for 25c.; 6 for 40c.

Gardens exposed to cold winds or fogs from lake or sea should have protection for early tender plants, especially Egg Plants, Tomato, Pepper and Vines.

Lisbon, Dak. June 28, '88.—Last year I bought seeds and plants of you that were splendid, and I had some magnificent vegetables. This year I thought I would buy nearer home and already see I have made a mistake. R. S. Ellis.

NICHOLS' MEDIUM GREEN.

N. Y. IMPROVED EGG PLANT.

VERY EARLY DWARF EGG PLANT.

EGG PLANT.—EIERFRUCHT.

CULTURE.—Sow the seed in a hot-bed in March or April. When about three inches high pot the plants and plunge in earth; transplant to open ground in May or June, according to the warmth of the season. Uniform heat is essential to this plant, and it rarely recovers from the least chill in its early growth. Set out, according to richness of soil, 2 or 3 feet apart each way. One ounce of seed makes 2,000 plants. [See also plants offered in our Vegetable plant list.]

NEW YORK IMPROVED.—The leading market sort, very large and smooth; fine dark color; very prolific and of excellent quality. Our strain of this variety is unexcelled, and has given the greatest satisfaction to market gardeners everywhere. Pkt., 10c.; oz., 50c.

Black Pekin.—Fruit round; almost black; very early. Pkt., 10c.; oz., 40c.

Very Early Dwarf.—Earliest of all, best to grow for home use from seed. Pkt., 10c.; oz., 30c.

ENDIVE.—ENDIVIEN.

CULTURE.—For early use sow about the middle of April, but for the main crop in June or July in shallow drills. When two or three inches high transplant or thin out to one foot each way. When full grown blanch the inner leaves by gathering and tying up the outer ones at the top; but tie up only when the leaves are dry and blanch in succession, as it keeps only a short time after blanching. For winter use take up with earth and plant closely in frames or a dry cellar. One ounce of seeds sows 150 feet of drill.

GREEN CURLED SUMMER.—A fine market sort; for early use. Pkt., 5c.; oz., 20c.; ¼ lb., 50c.

Green Curled Winter.—Tender green leaves, which blanch white. Hardy. Pkt., 5c.; oz., 20c.; ¼ lb., 50c.

MOSS, VERY FINE CURLED.—Tender, fine quality, very ornamental. Pkt., 5c.; oz., 20c.; ¼ lb., 65c.

Broad-leaved White.—Leaves large, broad and slightly curved. Pkt., 5c.; oz., 20c.; ¼ lb., 50c.

Ever White Curled.—Large leaves, pale green, crisp and tender. Pkt., 5c.; oz., 20c.; ¼ lb., 50c.

GARLIC.—KNOBLAUCH.

CULTURE.—Garlic sets should be planted early in Spring in a light, rich soil in rows one foot apart and from three to five inches apart in the rows. Cultivate like onions.

Garlic Bulbs.—¼ lb., 15c.; lb., 30c.; not prepaid, 10 lbs., \$1.50.

Garlic Sets.—Miniature, about the size of small Peas.

Pkt., 5c.; oz., 10c.; ¼ lb., 25c.

GOURDS.

See Nos. 467-502 of our Flower Seed List for a complete list of Gourds.

DISHCLOTH GOURD.—This remarkable plant derives its name from the peculiar lining of its fruit which is of a spongy, tough and very durable texture, which renders it very valuable as a natural dishcloth. Pkt., 10c.

SUGAR TROUGH.—They grow to hold from four to ten gallons each, have thick, hard shells, very light, but durable, having been kept in use as long as ten years, and are useful as buckets, etc. Pkt., 10c.; oz., 25c.

WHITE NEST-EGG.—Also called JAPANESE NEST-EGG GOURD, resemble in color, shape and size, the eggs of hens, and do not crack, and are uninjured by cold or wet, and therefore make the best nest-eggs. Pkt., 10c.

HERBS.—GEWUERZ-KRAEUTER.

CULTURE.—These have large use for culinary and medicinal purposes. Sow early in Spring in rich mellow soil in shallow drills one foot apart. Later transplant or thin out to a few inches apart in the row. Gather stems and leaves on a dry day, dry quickly in the shade and pack away closely.

pkt oz	pkt oz	pkt oz
Anise 5 10	Fennel..... 5 15	Sage Am. (lb. \$1.25) 5 15
Balm 5 10	Henbane 5 20	Summer Savory... 5 20
Belladonna 5 30	Hop..... 10	Sweet Basil..... 5 20
Bene 5 20	Horehound..... 5 35	Sweet Balm..... 5
Borage 5 10	Hyssop..... 5	Sweet Marjoram... 5 15
Caraway..... 5 10	Lavender..... 5 25	Tarragon 10
Catnip 5 40	Rosemary 10 50	Thyme 5 30
Coriander 5 10	Rue..... 5	Winter Savory..... 5 20
Dill..... (lb., \$1.25) 5 10	Saffron 5 15	Wormwood..... 5 20

SHORT TOP ERFURT KOHLRABI.

LARGE MUSSELBURGH LEEK.

KOHLRABI.—OBER-KOHLRABI.

CULTURE.—This vegetable, seemingly an intermediate between cabbage and turnip, and has value both as a table delicacy and feeding stock. The edible part is the enlarged stem just above the surface of the ground, which is in prime condition only when half grown. The full grown bulb is tough and stringy. For early use sow in hot-bed, transplant and cultivate like early cabbage. For winter use sow the middle of June or first of July in rows 18 inches apart, transplanting, or, as this is difficult, thinning out to eight inches in the row. One ounce of seed affords 2,000 plants.

Price except where noted, pkt., 5c.; oz., 20c.; ¼ lb., 60c.

SHORT TOP EARLY ERFURT.—Excellent for forcing and open ground.

EARLY WHITE VIENNA.—Flesh white and tender.

EARLY PURPLE VIENNA.—An excellent sort, a little later than the white.

Goliath Purple.—New, mammoth, smooth heads and very handsome, splendid cropper and good quality. Pkt., 5c.; oz., 25c.; ¼ lb., 75c.

LEEK.—LAUCH.

CULTURE.—Plant the seed in April, in drills one foot apart and one inch deep. When six to eight inches high, remove the plants to deep, rich soil, setting them in rows twelve to fifteen inches apart in the rows. Plant as deep as possible, and during growth draw the earth to them to blanch the stems. One ounce will produce about 2,000 plants.

BROAD SCOTCH, OR LONDON FLAG.—Hardy. A large, strong plant, with broad leaves. Pkt., 5c.; oz., 15c.; ¼ lb., 30c.; lb., \$1.10.

LARGE MUSSELBURGH.—Of enormous size, leaves large and broad. Of very mild, pleasant flavor. Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$1.85.

Rouen, Very Large Winter.—Large and excellent; grows to an enormous size; best of all for forcing. Pkt., 5c.; oz., 20c.; ¼ lb., 65c.

Perpetual French, NEW.—Multiplies like Garlic. Pkt., 10c.; oz., 35c.

MARTYNIA.

CULTURE.—This is cultivated for its seed pods, which when half-grown and tender are much esteemed for pickling. Sow the seed in May or June in open ground three feet apart each way. Thin to one plant in a hill. One ounce plants about 200 hills.

Martynia Probovidea.—For pickling. Pkt., 5c.; oz., 30c.; ¼ lb., \$1.00.

MUSHROOM SPAWN.—CHAMPIGNON-BRUT.

ENGLISH SPAWN IN BRICKS.

FRENCH SPAWN IN BOXES.

CULTURE.—In preparation for a mushroom bed, procure fresh horse manure, free from litter or straw, and old pasture soil. Mix thoroughly in proportion of three parts horse manure to one of loam. Turn daily until the extreme heat is out of it. Then in some sheltered place, if possible, make out of this compost a bed four feet wide, eight inches deep and as long as desired, pressed solidly. Leave this until the heat subsides to 90 degrees, then plant pieces of spawn the size of a walnut in holes two or three inches deep, six inches apart each way; cover with the compost, and in the course of a week or ten days the spawn will be diffused through the whole bed. Now cover with two inches of fresh soil, and over this spread three or four inches of hay, straw or litter. If the surface becomes dry, wet with lukewarm water. Keep an even temperature of 50° to 60°. One lb. will sow two by six feet. Having a large demand from the gardeners and greenhouse men we import fresh spawn in quantity each season.

One pound Bricks, English Spawn, each 25c.; (10 lbs., not prepaid, \$1.20.)

One pound Boxes, French Spawn, each 50c. Not prepaid.

Two pound Boxes, French Spawn, each 60c. Not prepaid.

Four pound Boxes, French Spawn, each \$1.50. Not prepaid.

DISHCLOTH GOURD.

LETTUCE.

BLACK SEEDED SIMPSON.

Five Cents per Packet, except where noted. (Prices below include postage.)

GREEN FRINGED LETTUCE.

CHICAGO FORCING.—This is undoubtedly the very best early market sort under glass; it is of quick growth, the leaves are crisp, tender and of very pleasant flavor. Pkt. 10c.; oz. 20c.; ¼ lb. 60c.

Early Curled Silesia.—Very early. Oz. 10c.; ¼ lb. 30c.; lb. \$1.00.

EARLY CURLED SIMPSON.—More curled than the above, does not head, but forms a compact mass of leaves. Oz. 10c.; ¼ lb. 30c.; lb. \$1.00.

BLACK SEEDED SIMPSON.—Larger than above, and lighter in color, the favorite among Chicago gardeners. Oz. 15c.; ¼ lb. 35c.; lb. \$1.25.

All the Year Round.—Does not tend to seed. Oz. 15c.; ¼ lb. 30c.; lb. \$1.

Boston Curled.—Leaves deeply frilled; white, crisp and of superior quality. Very handsome. Oz. 15c.; ¼ lb. 35c.

American Gathering.—Tender and of good flavor. Oz. 10c.; ¼ lb. 30c.

New Tomhammock.—Pkt. 5c.; oz. 20c.

Oak Leaved.—New; light green. The leaves are light green, oak shaped, slightly crimped, quite tender, but somewhat bitter. Oz. 15c.; ¼ lb. 50c.

GREEN FRINGED. It is of a light green color with the inner leaves nearly white, most beautifully fringed, of first-class table quality and highly ornamental. Fine for family use. Oz. 10c.; ¼ lb. 30c.; lb. \$1.00.

White Cabbage.—Forms fine, solid greenish-white heads; excellent for all seasons; is very tender, and withstands the heat extremely well. Oz. 10c.; ¼ lb. 35c.; lb. \$1.25.

HUBBARD'S MARKET.—One of the earliest and best head sorts, medium size, round, solid. Good for forcing or out-doors. Oz. 15c.; ¼ lb. 40c.

Rudolph's Favorite.—See novelties. Pkt. 10c.; oz. 40c.; ¼ lb. \$1.00.

STUBBORN HEAD.—New, yellow German sort; forms a very solid head, and is slow running to seed. A very desirable variety. Oz. 15c.

Ferry's Prize Head.—A good home garden sort; hardy and of fine flavor. Oz. 10c.; ¼ lb. 30c.; lb. \$1.25.

GOLDEN STONEHEAD.—It forms very large heads, larger than the Tennis Ball. It is unsurpassed for forcing and is equally valuable for outdoors. Oz. 15c.; ¼ lb. 40c.; lb. \$1.50.

Yellow Seeded Butter.—Very distinct; heads large, solid and yellow, crisp, tender and good flavor. Slow running to seed. Oz. 15c.; ¼ lb. 35c.; lb. \$1.25.

White Curled Head.—Fine quality. Oz. 15c.

The Deacon.—An excellent sort for early use and for Summer; heads are large and very solid, crisp and tender. Oz. 15c.; ¼ lb. 40c.; lb. \$1.50.

PERPIGNAN OR DEFIANCE SUMMER.—Unequaled for long standing. One of the finest new varieties of head lettuce, which stands the summer heat better than any other. It forms very large, solid heads, so firm that they have to be cut open to allow the flower shoots to come through. The leaves are of a light green color, very tender, crisp and fine flavor. This sort is a light seeder. Oz. 20c.; ¼ lb. 65c.; lb. \$2.00.

Marblehead Mammoth Cabbage.—The heads are quite distinct and closely wrapped together. The leaves are lightish-green. Second early, it is tender, crisp and free from bitterness. Pkt. 10c.; oz. 35c.; ¼ lb. \$1; lb. \$3.

HAISON.—Very large and sweet; heads green outside and white within; for out-door culture unexcelled. Oz. 15c.; ¼ lb. 35c.; lb. \$1.25.

HENDERSON'S NEW YORK.—Large heads, deep green in outside color with inside leaves yellowish-white. Pkt. 10c.; oz. 20c.; ¼ lb. 60c.

BLACK SEEDED TENNIS BALL, or Boston Market.—Very early; forms a firm close head. Oz. 15c.; ¼ lb. 35c.; lb. \$1.10.

SALAMANDER.—One of the best sorts for Summer use; forms very solid heads of yellow color, and withstands Summer heat extremely well. Oz. 15c.; ¼ lb. 40c.; lb. \$1.10.

New Buttercup.—A very attractive Cabbage Lettuce of large size, crisp and tender, delicate in flavor and very desirable for either Winter or Summer use, as well as for forcing. It forms fine large solid heads, and is remarkable for the beauty of its foliage which is of a bright citron yellow color. Pkt. 10c.; oz. 25c.; ¼ lb. 75c.; lb. \$2.50.

NEW BUTTERCUP LETTUCE.

Richmond, Ill.—Buttercup Lettuce can not be beat.
H. and W. Randall.

◆ MUSK MELONS. ◆

OUR WESTERN VINE SEED IS BEST IN THE WORLD.

CULTURE.—A rich, warm sandy soil is best for the musk melon. Plant the seed when the ground is dry and warm. Plant from 6 to 12 seeds in hills 6 ft. apart each way, and when danger from bugs is past thin to 3 vigorous plants in a hill. If mature is mixed in the hills at time of planting, see to it that it is old and well rotted. When the shoots are a foot long pinch off the tips to make them branching and strengthen the vine. Thin out the fruit if it is excessive. The remaining melons will thereby increase in size and ripen earlier. One oz. plants 75 hills.

Per pkt., 5c.; oz. 10c.; of any variety, except where noted.

OSAGE AND CHICAGO MARKET NUTMEG.—See novelties.

Netted Gem.—Globe shaped; skin green and thickly netted; flesh thick, light green and of fine flavor. One of the best. ¼ lb. 25c.; lb. 80c.

EARLY NUTMEG.—Green fleshed, highly scented, rich and sugary, skin green and finely netted. ¼ lb. 25c.; lb. 60c.

Baltimore.—Oz. 15c.; ¼ lb. 40c.; lb. \$1.25.

Champion Market.—See novelties.—¼ lb. 35c.; lb. \$1.10.

MONTREAL MARKET NUTMEG.

Montreal Market Nutmeg.—A large melon, nearly round, deeply ribbed; flesh remarkably thick, light green, of delicious flavor. Largely grown for the Montreal market, also a favorite South. ¼ lb. 25c.; lb. 80c.

IMPROVED CHRISTIANA.—Our grower of vine seeds, a high authority on this subject, claims that among all the leading kinds planted and grown by him, none equal his strain of Improved Christiana for home use. It is yellow fleshed and remarkable for early maturity. ¼ lb. 30c.; lb. \$1.00.

EXTRA EARLY NUTMEG.—(Also called Early Citron.)—We claim for this melon extreme earliness—10 days ahead of other kinds, fair size and quality. Market Gardeners who want the first sales will find this EXTRA EARLY decidedly profitable. Oz. 15c.; ¼ lb. 40c.; lb. \$1.25.

Large Boston Nutmeg.—An extra large strain of the green fleshed and netted skinned nutmeg, a good one. ¼ lb. 25c.; lb. 75c.

New White Japan.—Early, medium sized, roundish, prolific sort; flesh thick, greenish white. Oz. 15c.; ¼ lb. 35c.; lb. 85c.

New Surprise.—Early, very productive; like White Japan, but larger; flesh thick, salmon colored; a good sort for family use. ¼ lb. 20c.; lb. 70c.

Bay View.—One of the largest musk melons in cultivation, very prolific; flesh green and sweet. ¼ lb. 25c.; lb. 75c.

Hackensack.—Grows uniformly, large, round, sweet, productive, skin and flesh green; we recommend it for market and private use. ¼ lb. 25c.; lb. 75c.

EARLY HACKENSACK.—Similar to above but smaller and earlier; quality good; it is very popular. ¼ lb. 30c.; lb. \$1.00.

EMERALD GEM.

EMERALD GEM.—Salmon flesh, fine for home garden. ¼ lb. 35c.; lb. \$1.

Casaba.—Large pointed, fine flavor, green, thick flesh; one of the largest and best melons in cultivation. ¼ lb. 25c.; lb. 85c.

Skillman's Netted.—Larger than Netted Gem. ¼ lb. 25c.; lb. 85c.

Ward's Nectar.—A green fleshed variety of fine quality, extremely sweet and delicious; the smaller melons of this class are growing in popularity with some hotels and restaurants. ¼ lb. 30c.; lb. \$1.00.

Vick's Ex. Hy. Prolific.—A nutmeg and a good one. ¼ lb. 25c.; lb. 85c.

Improved Canteloupe.—A first-rate, early, large round market sort, sweet and of good flavor. ¼ lb. 25c.; lb. 75c.

Jenny Lind.—Excellent quality, early, small, flattened at the ends, flesh light green. ¼ lb. 25c.; lb. 75c.

Golden Gem, or Golden Jenny.—Productive, early, very uniform in shape; flesh very thick, green and of fine flavor. ¼ lb. 25c.; lb. 75c.

Reedland Giant.—A showy variety of enormous size, often reaching 25 lbs.; flesh green, melting, sweet. Oz. 15c.; ¼ lb. 50c.; lb. \$1.75.

Miller's Cream.—See novelties. Oz. 15c.; ¼ lb. 50c.; lb. \$1.60.

Banana.—Long, banana-like fruit, distinct. Oz. 15c.

Bird Canteloupe.—This new sort is a cross of the Montreal and Bay View, and surpasses both these well known varieties in size. The flesh is thick, light green and of fine quality; quite early and a splendid keeper. Oz. 15c.; ¼ lb. 40c.; lb. \$1.25.

MELON SEED FOR FANCY WORK. Per oz., 10c.; 1-4 lb., 30c.

WATERMELONS.

ALL MELON SEEDS IN 5 LB. LOTS, 15C. LESS PER LB., NOT PREPAID.

SEMINOLE WATERMELON.

FLORIDA'S FAVORITE WATERMELON.

KOLB'S GEM WATERMELON.

Prices below include prepayment by mail.

CULTURE—In light soil, with a hot, sunny exposure, the Watermelon thrives best. Plant in hills 8 to 10 feet apart each way, and cultivate like the Mink Melon. To secure the largest fruit, have but one or two melons to a vine. One ounce of seed will plant about 60 hills.

Per pkt. of any kind, 5c.; oz., 10c.; except where noted.

NEW SEMINOLE.—The numerous excellent qualities which this new melon possesses will make it the most popular sort grown. It is extra early, enormously productive, very large and of splendid flavor. The seed will often produce grey and green melons on one vine, but the number of the former predominates. It is undoubtedly one of the finest melons yet introduced. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.00; lb., \$3.25.

Kentucky Wonder.—See novelties. Per pkt., 15c.

Hungarian Honey.—The richest and sweetest flavored of all Watermelons. Pkt., 10c.; oz., 25c.

GLORY OF ASIA.—Hardier and two to three weeks earlier than any other watermelon, fine grained and of delicious sweetness. They are roundish oval, light green, very hard and excellent keepers. Seeds very small. Every customer should include this variety in his order. Pkt., 10c.

PHINNEY'S IMPROVED.—Early, prolific, red fleshed; very sweet; an excellent market variety; seeds white. ¼ lb., 25c.; lb., 75c.

KOLB'S GEM.—This new variety originated in Alabama three years ago, and has proven to be a valuable acquisition. It is uniformly round and grows to a good size, often attaining a weight of twenty-five to fifty pounds. Its flesh is bright red and flavor excellent; rind dark green, striped and very tough. It is unsurpassed as a shipping melon, retaining its freshness and sweetness for a long time. Oz., 15c.; ¼ lb., 30c.; lb., \$1.00.

Oemler's Triumph.—An early Russian Melon of small size, flesh red with an edging of orange yellow. It has no lighter colored or tasteless core and is very sweet. The seeds are so small that they can be eaten with the melon. Pkt., 10c.; oz., 75c.

VOLGA.—Another of the distinct Russian sorts; and a very showy one; the skin being a greenish white, perfectly round, and the inside of very bright red and excellent flavor; it is rather late and a good keeper. Will attract attention wherever shown. Pkt., 10c.; oz., 25c.; lb., \$2.50.

CHINESE.—This peculiar melon we found in use in the Chinese quarter ("Chinatown") in San Francisco, stored on shelves during the winter. They use it cooked as we do squash. The flesh is white, and has a peculiar flavor, not at all resembling that of a melon, but much relished by the Chinese. The melon shown in the illustration weighed 35 ½ pounds, and was considered a fine specimen. Valuable mainly as a curiosity that will attract considerable attention. Pkt., 10c.; 3 pkts., 25c.

CHINESE WATERMELON.

MUSTARD.—SENE.

CULTURE.—A desirable Spring salad. Can be sown as soon as the ground is free from frost, and successive sowings should be made every two or three weeks. It grows rapidly and must be cut down when young. Sow in shallow drills one foot apart, and when three inches high thin out to five or six inches apart. One ounce of seed sows about 75 feet of drill.

White.—Best for salad and general use. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 40c.

Brown.—Stronger and more pungent than the white. Pkt., 5c.; oz., 10c.; lb., 40c.

NASTURTIUM.—INDIAN CRESS.

CULTURE.—A very ornamental climber, much cultivated for the green seed-pods, which make very delicate pickles. The leaves are also used for salad. Plant in May, in drills one inch deep, and give them some support to climb upon. One ounce of seed sows twenty feet of drill.

Tall.—Very pretty vine. Pkt., 5c.; oz., 20c. (See also Flower seeds.)

OKRA, or GUMBO.

CULTURE.—Sow in May, in hills or drills, three feet apart. If in hills thin out to three plants, if in drills to ten inches apart in the drills. Seed thickly and cover one inch deep. The young green seed-pods are used in soups or like Asparagus. The seeds are sometimes used as a substitute for coffee. One ounce of seed sows twenty-five feet of row.

Dwarf.—Early and prolific. Pkt., 5c.; oz., 15c.; ¼ lb., 50c.; lb., \$1.75.

Tall.—Five to six feet. Pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

New Velvet.—See novelties.

VICK'S EARLY.—A fine early sort, flesh bright pink, solid and sweet. ¼ lb., 25c.; lb., 75c.

GRAY MONARCH.—One of the largest melons grown; skin very light, mottled; flesh bright red and of excellent quality. Oz., 15c.; lb., \$1.00.

JOHNSON'S CHRISTMAS.—A late keeping variety with very tough rind, stands shipping well. The flesh is of a rich scarlet, very solid and of delicious flavor. Seeds are drab-white, few and small. Oz., 15c.; lb., \$1.50.

MOUNTAIN SWEET.—Early, solid, large, sweet and delicious. Rind thin, dark green; an old favorite for home and market. ¼ lb., 25c.; lb., 75c.

Mountain Sprout.—Large, flesh red and of excellent quality. Is rather late and will keep longer than Mountain Sweet. ¼ lb., 25c.; lb., 75c.

Ferry's Peerless.—Medium size; thin rind; very sweet. One of the best for the home garden. ¼ lb., 25c.; lb., 75c.

Pride of Georgia.—Dark green, oval, a good shipper. Attains a large size. Oz., 10c.; ¼ lb., 25c.; lb., 80c.

CUBAN QUEEN.—A very fine variety, growing to great size, flesh bright red, very solid and sweet. ¼ lb., 25c.; lb., 75c.

Ice Cream.—White seeds, scarlet flesh; early, medium size, thin rind; fine variety for family use. ¼ lb., 25c.; lb., 75c.

Black Spanish.—Large, round, very sweet, scarlet fleshed, skin dark green, black seeded. ¼ lb., 25c.; lb., 75c.

Sculptured Seeded Japan.—Very early. ¼ lb., 35c.; lb., \$1.00.

SCALY BARK.—Large size, remarkably good shipper; rind dark green, with scaly markings, thin and tough; flesh light crimson, solid and of fine flavor. ¼ lb., 30c.; lb., \$1.00.

MAMMOTH IRONCLAD.—Melon of immense size, handsomely marked, oblong in shape, flesh bright red and very solid, heart large and flavor delicious; seeds drab-white. The rind, while very thin, is remarkably hard. It matures early and keeps well. These qualities, together with its uniform heavy yield, combine to render it one of the very best for market and shipping. ¼ lb., 30c.; lb., \$1.00.

Dark Icing.—Round, solid, white seeded, dark skinned; medium in size, of delicious flavor; a fine shipper. ¼ lb., 25c.; lb., 75c.

Long White Icing.—Quality the very best. ¼ lb., 25c.; lb., 80c.

Rattlesnake.—Large; shape long; rind thin; flesh bright red; skin striped; an excellent market sort and a good shipper. ¼ lb., 25c.; lb., 80c.

Gipsy Striped.—Very large and prolific. ¼ lb., 25c.; lb., 75c.

Boss.—Handsome, early, flesh deep scarlet, of rich flavor; oblong in shape, and of nearly the same diameter throughout. ¼ lb., 25c.; lb., 80c.

Citron.—For preserves; flesh white and solid, seeds red. ¼ lb., 15c.

Colorado Citron.—Immensely prolific, flesh very firm and solid; size very large and preserving qualities the very best. Oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

JUMBO and Green and Gold.—See novelties.

FLORIDA'S FAVORITE.—A new, medium sized, very prolific melon for the home market if sold within teaming distance of where it is grown. It is highly praised by the originator, who is a great melon grower. Our price is very moderate this season. Gardeners can well afford to try its merits, which we think of high order. Oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

PARSNIP.—PASTINAK-WURZELN.

CULTURE.—The Parsnip has value not alone as a table vegetable, but it is also one of the best roots for stock-feeding. Its long slender roots call for a deep, mellow, rich soil. A shallow bed or a dressing of fresh manure will make short, forked roots of inferior quality. Sow early in Spring in drills 15 inches apart and ½ inch deep. When the plants are 2 or 3 inches high thin out to 6 inches in the rows. Cultivate often until the leaves cover the ground. These roots are improved by frost, and the bulk of the crop should be left in the ground over winter. Such as are wanted for immediate use store in a dry cellar with a covering of sand. One oz. contains about 6,000 seed and will sow 200 ft. of drill.

Long Smooth, or Dutch.—Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 55c.

HOLLOW CROWN or Guernsey.—An improved strain of Hollow Crown, medium in length, superior in quality. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

ABBOTT'S IMPROVED.—Smooth and large, one of the best. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Racine, Wis., Oct. 29, '88.—I am well satisfied with the Vaughan's Pickling Onions, but they must be sown very thick or they will grow too large.

William C. Brose.

Traer, Iowa, Oct. 30, '88.—Your pickling onions are very nice and some of my customers who bought once bought the second and third time. Shall send you a good order next year as I like your way of treating customers; I have been bit hard with some and that is the only chance they get; once is enough for me.

F. H. Harmon.

Crop of 1888.

• PEDIGREE ONION SEED •

Crop of 1888.

We offer below the best Pedigree Onion Seeds from growers who select carefully each year their Seed Onions, and believe no better strains are grown. We sell only crop of 1888. We could easily purchase Onion Seeds that could be sold 30 to 40 per cent. cheaper, but believe that "cheap Onion Seed is always dear." WE ARE HEADQUARTERS ON ONION SETS.

Five pound lots not prepaid, 10c. less per pound.

W. H. HOLMES, a practical onion grower for fifty years, says "Time but deepens the conviction that the frequent failures in raising this crop are the result of avoidable causes; all, but the variations of the seasons, being controlled by man, who by the selection and preparation of soil, the judicious application of fertilizers, THE CHOICE OF SEEDS and thorough tillage, can secure returns in proportion to the adequate use of these means. Mistaken economy in one or more of these conditions occasions the loss which annually drives out of the business careless or penurious cultivators."

Packet of any variety, 5c., except where noted.

See also our DISCOUNT ON PACKETS.

GLOBE YELLOW DANVERS.—This variety is now the standard medium yellow onion of our markets the country over. Our strain of this sort is unsurpassed. It is early, large and a very heavy yielder. It has a very small neck and is an excellent keeper. Oz., 15c.; ¼ lb., 40c.; lb., \$1.50.

EARLY FLAT YELLOW DANVERS.—Differing from the Globe strain only in shape, being more flat. Very productive. Oz., 15c.; ¼ lb., 40c.; lb., \$1.50.

EARLY ROUND or Thick Yellow Danvers.—A very early variety, round with small neck; ripens very uniformly and yields large crops; is a good keeper. We have a fine strain of Massachusetts grown seed of this, which has given the best of satisfaction for more than ten years. This true stock is always scarce. Oz., 25c.; ¼ lb., 75c.; lb., \$2.75.

EARLY RED GLOBE.—Very early, and grows to a good size; is very prolific and keeps well; skin deep red, firm good and flavor mild. (Do not confound this with Large Red Globe). Oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

Early Flat Red.—A rapid grower; very early and exceedingly fine quality; good where seasons are short. Oz., 20c.; ¼ lb., 60c.; lb., \$1.75.

YELLOW STRASBURG. (Yellow Dutch).—Later, flatter and larger than yellow Danvers; good keeper. Oz., 15c.; ¼ lb., 40c.; lb., \$1.50.

Extra Early Red. (Wethersfield).—An early, thick red onion a little later than "Early Flat Red" and earlier than Red Wethersfield, better for short seasons. Oz., 20c.; ¼ lb., 60c.; lb., \$2.00.

LARGE RED WETHERSFIELD.—We have a large demand for this from all sections; it is the main crop variety with many growers, and we can supply reliable new crop seed at rates suitable to the present low prices for onions. Oz., 15c.; ¼ lb., 50c.; lb., \$1.60.

White Globe.—Handsome of all the standard kinds. Oz., 25c.; ¼ lb., 85c.; lb., \$2.85.

White Portugal or Silverskin.—Very early, mild-flavored, excellent for growing sets, though it produces fine Onions from seed. Oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

El Paso or Mexican.—A mammoth white flat onion, mild flavor, and good cropper. Great favorite in Mexico and Arizona. Good for all parts of the south. Pkt., 10c.; oz., 25c.; ¼ lb., 90c.

New Maze.—See Novelties. Will keep a year. Pkt., 10c.

The rates per lb. include prepayment by mail.

Philadelphia Silverskin.—Celebrated as the best variety for sets. Pennsylvania gardeners plant no other. Oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

Extra Early Pearl.—A very handsome pearly white sort of medium size, fine for home use. Oz., 20c.; ¼ lb., 75c.; lb., \$2.75.

Dark Red August.—See Novelties. Pkt., 10c.; oz., 30c.; ¼ lb., 90c.; lb., \$3.00.

Vaughan's Pickling Onion.—A pure white, hard, round, small Onion, with good keeping quality; is most desirable for pickling purposes, and possesses all the requisites of a first-class pickling Onion, in the highest degree. Oz., 15c.; ¼ lb., 40c.; lb., \$1.50.

ITALIAN ONIONS.

The Italian onions are very popular, owing to their quick growth, large size and mild flavor, many sorts making onions weighing two to four pounds from seed the first year; the smallest, if set out in the second season, will continue to increase in size, instead of running to seed like the American onions. They succeed well in every section of the country.

GIANT ROCCA.—A fine, globe-shaped variety, of mild and delicate flavor, immense size, sometimes weighing three pounds, with light brown skin. An excellent keeper. Oz., 15c.; ¼ lb., 40c.; lb., \$1.40.

GIANT YELLOW ROCCA.—Resembling the above in size and quality, but of a beautiful golden yellow color. Oz., 15c.; ¼ lb., 50c.; lb., \$1.85.

MAMMOTH SILVER KING and POMPEII.—See novelties.

White Queen.—Remarkable for its extreme earliness and very mild flavor; it is small and white skinned, much liked for pickling. Oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

WHITE BARLETTA ONION.—It is of a beautiful waxy white color and grows 1½ inches in diameter and ¾ of an inch thick, with finely formed bulbs, slightly flattened at the top. Its earliness will highly recommend its use as a substitute for Onion sets. Pkt., 10c.; oz., 25c.; ¼ lb., 75c.

Albany, Ill., Oct., 30, '88.—White Barletta Onion is a Jewel I should judge, comes in just after early sets, does nicely for bunching and then as they matured I sold at 75 cts. per peck long before other Onions from seed were big enough to use; were such beauties to look at, every one wanted to know what they were. Matured small, the largest measured barely 2 inches in diameter.

C. B. Paddock.

ONION SETS.

CULTURE.—Sets furnish large onions early, as well as the first green onions for table use. Plant the sets as early in Spring as possible, in shallow drills, one foot apart, and four inches between sets. Cover slightly. They can be used in a green state in June, and are ripened off by July. To grow sets, sow the seed early in Spring very thickly in beds or drills. When the tops die down, gather the little bulbs, dry and store. Potato Onions are grown only from bulbs, and should be planted in April. Select large bulbs, and set them 10 inches apart, their crowns just below the surface. One quart of sets is needed for 100 feet of drill.

We supply these in quantity to seedsmen and market gardeners, and store each season many hundreds of bushels. They are fine sets, dry, of fair size and carefully cleaned. The prices, of course, are subject to market changes, and if you need a quantity always write us for latest quotations. We keep regularly in stock only the following kinds: [Prices quoted are by measure.]

Quart prices include postage; pecks at purchaser's expense.

White Bottom Sets.—Very fine. Qt., 30c.; peck, \$1.00; bush., \$3.90.

Yellow Bottom Sets.—Qt., 30c.; peck, 85c.; bush., \$3.00.

Red Bottom Sets.—Qt., 30c.; peck, \$1.00.

Potato Onions.—Qt., 30c.; peck, \$1.00; bush., \$3.50.

Red Top Sets.—Qt., 30c.; peck, \$1.00.

Yellow Top Sets.—Very fine stock. Qt., 30c.; peck, \$1.25.

Egyptian Tree or Winter Onions.—Qt., 30c.; peck, 90c.

Shallots.—Small onion, grows in clumps. Qt., 30c.; peck, \$1.15.

Write for Samples and Lowest Market Rates on Larger Lots.

© VAUGHAN'S GARDEN PEAS. ©

QUART PRICES INCLUDE PREPAYMENT BY MAIL. IF TO GO AT BUYER'S EXPENSE 15 CENTS MAY BE DEDUCTED FROM THE QUART PRICE.

CULTURE.—Peas succeed best in light, dry, loamy soil. Early and dwarf sorts require richer soil than the late varieties. If manure is used, let it be old and well rotted, or there will be a rank growth of vines with few pods. Sow the early, smooth, round sorts as early in Spring as the ground can be worked. Seeds of wrinkled varieties are more liable to rot if the ground is cold, and must be planted later. Sow all the varieties quite early, and depend for succession upon the different times of ripening of the various sorts, or from the first sowing, sow every two weeks until June for a succession. After that there is danger of mildew. Discontinue then until August, when a planting of an extra early or early sort will often produce a good crop. Sow the seed in single drills, 3 feet apart for dwarf sorts, and 4 for tall sorts, or in double drills 6 or 8 inches apart, 1 inch apart in the drill, and not less than 4 inches deep, or for the late sorts 7 to 8 inches deep, since deep planting prevents mildew and prolongs the season. Cultivate well and draw the earth twice to the vines during growth. Stake the tall varieties when they begin to vine. Pick the pods as soon as fit, and allow none to ripen on the vines, as they then will cease bearing. One quart of the small seeded sorts will sow 175 feet of drill. One quart of the large seeded sorts will sow 120 feet of drill. FIGURES PRECEDING THE NAMES INDICATE THEIR HEIGHT IN INCHES.

PER LARGE PACKET OF ANY SORT, 10c.,
PREPAID BY MAIL.

HORSFORD'S MARKET GARDEN PEA.

EXTRA EARLY SORTS.

- 9 in. **BLISS' AMERICAN WONDER.**—The earliest of the wrinkled peas; very dwarf and remarkably productive, having very large pods containing 6 to 9 large peas. Flavor unsurpassed. We heartily recommend this pea as a first early sort. Qt., 40c.; pk., \$1.50; bu., \$5.50.
- 30 in. **Laxton's "Earliest of All."**—Offered last season for the first time. The very best of all the first early hardy blue-colored varieties, and has proved to be all that its name implies. It is an abundant bearer of good-sized, well-filled pods, and the peas are even in size, of fine color, and delicious when cooked. Qt., 40c.; peck, \$1.65; bush., \$6.00.
- 30 in. **"MAUD S."**—See novelties.
- 30 in. **PHILADELPHIA EXTRA EARLY.**—Very fine early pea, flavor good; bears abundantly; it is a favorite market sort. Our strain of this is very carefully selected. Qt., 40c.; peck, \$1.25; bush., \$4.00.
- 10 in. **Little Gem.**—Very early, dwarf, green wrinkled marrow pea; quality excellent; it needs no support and bears abundantly. Matures in 8 weeks. Qt., 40c.; peck, \$1.35; bush., \$5.00.
- 10 in. **EXTRA EARLY PREMIUM GEM.**—An improvement on the Little Gem; very dwarf and prolific; pods large. Qt., 40c.; pk., \$1.35; bu., \$5.25.
- 30 in. **First and Best.**—Extremely early, productive, and ripen all the same time. Qt., 40c.; pk., \$1.25; bu., \$4.00.
- 30 in. **ALASKA.**—This new market Pea has become a standard variety, proving to be not only several days earlier than most early sorts, but of larger size and ten per cent. more productive. The vines are very dwarf, growing about twenty inches high, peas blue. Pt., 20c.; Qt., 40c.; peck, \$1.50; bush., \$5.25.
- 30 in. **DAN'L O'ROURKE.**—Qt., 35c.; peck, \$1.25; bush., \$4.25.
- 26 in. **Laxton's Alpha.**—Very prolific early wrinkled variety. Qt., 40c.; peck, \$1.50.
- 12 in. **Blue Peter.**—A very vigorous grower; dwarf and prolific; peas large and of fine quality. Qt., 40c.; peck, \$1.35; bush., \$5.00.

SECOND EARLY SORTS.

- 18 in. **Abundance.**—Large, fine flavor, very prolific. Qt., 45c.; peck, \$2.00.
- 30 in. **McLEAN'S ADVANCER.**—Bears an abundance of long, full pods at end of the vine; growth vigorous; peas very sweet and tender. Best second early sort for home and market garden use. Qt., 40c.; peck, \$1.25; bush., \$4.25.
- Horsford's Market Garden.**—One of the best second early peas; a cross between the "Alpha" and "American Wonder." It grows from 20 to 30 in. high, is very stocky, and requires no bushing. It is extremely prolific and bears its pods always in pairs. If you are a gardener and have not yet planted this, try a peck for 1889, it is good. Pt., 20c.; qt., 40c.; pk., \$1.50; bush., \$5.25.

Normal, Ill., Nov. 13, '88.—I received my potatoes all right. Am well pleased with them. Will give you an order for my Garden Seeds soon. The seeds I got of you last year did finely.
Thomas Douglas.

PRIDE OF THE MARKET.

FOR GENERAL CROP AND LATE USE.

- 24 in. **PRIDE OF THE MARKET.**—This has already become one of the most popular Market Peas in existence. In length of pod it is equal to Stratagem, from which it differs in possessing a greater depth of color, with round, blue seed. It grows from eighteen inches to two feet in height, and bears grand pods well filled with large and fine flavored Peas from top to bottom. WE URGE ITS TRIAL BY EVERY GARDENER. Its robust constitution, enormous yield and superior appearance, ensures its acceptance as a favorite with the public. Qt., 40c.; pk., \$1.65; bu., \$6.00.
- 60 in. **CHAMPION OF ENGLAND.**—The standard late variety for either market gardens or private use. Qt., 35c.; peck, \$1.00; bush., \$3.50.
- 24 in. **Yorkshire Hero.**—Very vigorous grower of branching habit; pods large, round and well-filled; peas white and wrinkled, of extra fine quality; a great cropper. Qt., 40c.; peck, \$1.00; bush., \$3.75.
- 30 in. **Dwarf Blue Imperial.**—Qt., 40c.; pk., \$1.25.
- 42 in. **Long Island Mammoth.**—This Pea is a general and universal favorite with the Long Island market gardeners (where it was originally introduced), being an excellent cropper. Pods large, quality good, earlier than the Champion of England. We particularly recommend this variety for market use. Pt., 20c.; qt., 40c.; peck, \$1.50; bush., \$5.75.
- 24 in. **Everbearing.**—Late dwarf variety of robust growth, forming sometimes as many as ten branches from a single stalk; pods 3 to 4 in. long, containing 6 to 8 large wrinkled peas often half an inch in diameter, rich and marrowy. Continues remarkably in bearing, producing new blossoms after repeated picking until frost. Qt., 40c.; pk., \$1.25; bu., \$5.00.
- 48 in. **Laxton's Evolution.**—A large wrinkled pea of unusually rich and sugary quality. A very desirable point is its long period of bearing, a single sowing continuing to bear for several weeks. Pt., 25c.; qt., 50c.; peck, \$2.00.
- 60 in. **Tall Grey Sugar.**—Edible podded when young, used like snap beans or shelled. Qt., 40c.
- 48 in. **TELEPHONE.**—This strong growing sweet wrinkled pea is driving out of the local market the common kinds of early hard peas, owing to its strong growth, large, handsome, well filled pods, and very fine table quality. Market gardeners have found it the most profitable sort. The vines often bear 18 to 20 pods per stalk, each containing 6 or 7 large peas. Qt., 45c.; peck, \$2.00; bush., \$7.50.
- 24 in. **Stratagem.**—An English blue wrinkled marrow of recent introduction; vines of strong growth as to need no support, and remarkably free-bearing; peas very large and fine flavored, pods sometimes six inches in length and well filled. Qt., 45c.; peck, \$2.00; bush., \$7.00.
- 36 in. **Black-Eyed Marrowfat.**—Qt., 30c.; peck., 65c.; bush., \$2.25.
- 48 in. **Large White Marrowfat.**—Qt., 30c.; peck, 75c.; bush., \$2.25.
- Canada Field Peas.**—Peck, 50c.
Write for market rates on large lots.

TELEPHONE.

STRATAGEM.

VAILGHAN'S NORTHERN MICHIGAN POTATOES.

CHANGE YOUR SEED STOCK.

MATURE EARLY.
INCREASED YIELD.

OUR SEED POTATOES here offered have been grown for us from genuine stock, ESPECIALLY FOR SEED, on the extreme Northern shores of Lake Michigan; the soil is new, mostly sand, and but lately cleared of hard wood timber. The advantages of such seed are early maturity, increased yield, and vigorous, healthy growth, with vitality to resist disease.

IF YOU WANT A CHANGE OF SEED POTATOES. (and it will pay you,) TRY OUR NORTH MICHIGAN STOCK, which we offer this season at very moderate prices as long as our supply lasts.

The great bulk of our Potato trade is for the best new standard kinds in barrel lots and upwards to gardeners and others who believe in a change of seed and in selected Potatoes kept pure. To such buyers we are prepared to furnish straight stock, grown on the Northern lake shores and at very moderate prices. They have been well cared for while growing, digging, packing and storing, and are shipped in new barrels.

WE SHALL SHIP as early as is safe from frost. We will ship when requested, any time when customers wish to take their own risk. Orders from the South can be shipped at any time (except during very severe weather) as direct Southern trains from Chicago are out of freezing weather in twenty-four hours. On LATE ORDERS it will save time to state, in case supply of some kinds is exhausted, whether you wish us to return money or substitute other sorts of same value.

10 BBL. LOTS OF ONE OR MORE KINDS 20 CENTS PER BBL. LESS.

Our Barrels contain 2 1/4 bushels or 165 lbs., net.

Any variety free by mail (except otherwise noted), per lb., 30c.; 3 lbs. of one kind for 75c.

EARLY ALBINO. [Product of one Eye, 1888.]

• EARLY ALBINO. •

A new seedling, native of Vermont, which we introduced last year, has given such excellent and general satisfaction that we place it at the head of our list for early potatoes for 1889. It is half long, cylindrical in shape, white skin, very early, and of the BEST QUALITY. Our grower in Michigan and one near Chicago find it remarkably productive, while scores of our customers have written us in high praise of it. It is a cross of Early Ohio and Snowflake and results are in keeping with the high standing of those sorts. (Most of our stock of this sort has been grown near Chicago.)

Try it for a new and GOOD EARLY.

Pk., 75c., bu., \$2.25; bbl., \$5.00.

Amboy, Ill., Oct. 30, '88.--I have tested the Early Albino Potato procured from you and feel quite satisfied with its excellent qualities as an early potato. It is also a good yielder with proper cultivation. In regard to the Thorburn it is also a highly esteemed variety, always rewarding the laborer for his time and trouble, and I would not forget the Alexander Prolific, which of course is a much later potato, but for size and quality unexcelled.

Wm. Newton.

NEW BADGER STATE.

A large, oblong white potato of excellent market shape and appearance. A strong grower and good yielder. It is from a seed-ball of Burbank's Seedling fertilized with Wall's Orange. The originator, Mr. Huebner, of Wisconsin, says: "This variety, now four years from the seed-ball, has been for the past three years one of the largest yielders among 200 varieties grown by me. The tubers average from large to very large. The vines are very strong. The skin is firmer than most sorts, making it a first class shipper. My aim in propagating the BADGER STATE has been to substitute a new one for the Burbank's Seedling. It is a good table sort and will compare well with the Empire State."

Price per lb., 50c.; 3 lbs., \$1.00; 1-2 peck, 75c.; peck, \$1.25; bush., \$4.00; bbl., \$10.00.

NEW BADGER STATE.

GREEN MOUNTAIN.—A late intermediate, good size, white, handsome form. Quality good and a good keeper. The Rural New Yorker reported it in 1887 as giving the largest yield ever harvested on their grounds. It is without doubt a remarkable cropper.

Per peck, 60c.; bush., \$1.75; bbl., \$3.85.

HARLEQUIN.—Variegated foliage making a showy lawn and border plant, of quick growth. Tuber resembles Early Rose. We imported it this season from Germany.

Per lb., 50c.; 3 lbs., \$1.00, postpaid.

SUNLIT STAR.—Our grower says: "A good early sort, first-class. Even in size, no little ones, prolific, white, without any red streak. One of the first."

Per peck, 60c.; bush., \$2.00; bbl., \$4.50.

SENECA BEAUTY.—Medium in season, color rosy with eyes of deeper shade, very handsome; in shape, oblong; very smooth. Mr. Bork says "One pound of seed cut to single eyes yielded 78 lbs., being 9 lbs. more than Empire State. They are very uniform in size, none hollow and few prongy, and in table quality unexcelled."

Per peck, 60c.; bush., \$2.00; bbl., \$4.50.

OHIO JUNIOR.

—Although a chance seedling, it is without doubt related to that good old sort the "Early Ohio," as it is almost identical with that variety in the form and marking of the tubers, habit of growth, etc. Probably the first and only instance where the "Ohio" has been reproduced from seed. The tubers are oval oblong, round at the seed end, with full eyes that are almost even with the surface. It is an excellent keeper, very productive and of fine quality. Our grower says: "It is earlier than Early Ohio; a nice, smooth, even, medium potato." It may be called an Early Ohio with new blood.

Per peck, 50c.; bush., \$1.75; bbl., \$4.00.

PURITAN.—It is a valuable medium growing variety. Second in lateness, ripening after Lee's Favorite. Very good yielder. Fine large potato, cooks well. They are larger than the White Star. They are earlier than the Empire State about a week or 10 days and larger.

Per peck, 60c.; bush., \$2.00; bbl., \$4.25.

WRITE FOR SPECIAL RATES ON TEN OR MORE BARRELS.

Communia, Iowa, Oct. 6th, '88 --Last Spring I received from you 10 lbs. of Ohio Jr. Potatoes from which I raised 380 lbs. this fall. It is an excellent Potato and about two weeks earlier than Early Rose.

George Muegge, P. M.

EARLY OHIO.—Now widely known, and deservedly one of the most popular sorts that "grow in the ground." We grow it more extensively than any other, finding it the most popular of all the older standard kinds we offer. Our 1883 crop which we now have in store, was grown from new seed direct from the locality in Ohio where the variety originated and can not be excelled for purity, while in size and handsome appearance the tubers this year are the best for four years past. As most are aware it succeeds best on moist, rich soils and is fit for table use before fully ripe, hence salable very early. We first introduced it at Chicago and recommend it strongly for general market use everywhere.

Per peck, 50c.; bush., \$1.75; bbl., \$4.00; 10 bbls., \$36.00.

RURAL NEW YORKER No. 2, (New).—Introduced this season from the R. N. Yorker's experiment ground and described by them as follows: "Rural New Yorker No. 2 is a potato of most distinct appearance, and could readily be distinguished among a hundred others. It is very large and unusually smooth, with few and shallow eyes; in form it is oblong, inclining to round and rather flattened; the skin is white, as is the flesh, which is of superior quality. In maturity the variety is intermediate, and its solidity and vigor are such that it has rotted less in very wet seasons than any of the numerous sorts grown with it. The vines are heavy and strong, and the yield of handsome tubers of great uniformity of size is unusually large—less than ten per cent. of the potatoes dug have been of unmarketable size.

1-2 peck, \$1.25; peck, \$2.00; bush., \$6.00; bbl., \$13.00.

LEE'S FAVORITE.—A very early and superior potato, similar to Early Rose in shape, but very light in color, shading to pink about the eyes. Size uniformly large; skin smooth, flesh cooks very white, (a most desirable fact for market use); quality of the very best. It is entitled to a very high rank among the early sorts, for the following reasons: **Extreme Earliness**, being one week earlier than Hebron. **Very Productive**, having yielded at the rate of 400 bushels per acre. **Good Size**, some tubers having weighed one pound each, and but a small portion of small or undersized tubers in the crop. Its size, extreme earliness and fine appearance justify us in calling it, for most soils, the earliest desirable market sort. Our grower says: "Lee's Favorite is the quickest to grow and mature and yield a good crop of any kind I ever saw." We have given the above strong certificate to the Lee's Favorite for two years past and we say it again. We could only wish it was a white skinned sort, though that makes no difference in many markets

Per peck, 50c.; bush., \$1.65; bbl., \$4.00.

PEARL OF SAVOY.—The Pearl of Savoy, an extra early variety, was first introduced in 1884, and has become widely known and deservedly popular. Our demand for it, though not remarkably large, has steadily increased. The yield is equalled by but few of the prominent varieties, while the quality is first class. The potato is a cross between Clark's No. 1 and Early Vermont. Resembles Early Rose, but is lighter in color. Prominent authorities who have tested it with many other sorts find it one of the **very earliest**. Our Northern grown seed can be highly recommended.

Per peck, 50c.; bush., \$1.65; bbl., \$3.75.

EARLY MAINE.—A rosy skinned, very early sort. We have sold it for three years and it has given excellent satisfaction. For it may well be claimed "**EARLINESS, YIELD and QUALITY.**" We place it alongside of Lee's Favorite and Albino in all the qualities of a first class potato.

Per peck, 50c.; bush., \$1.65; bbl., \$3.75.

VICK'S GEM.—Sent out by Jas. Vick in 1884 as "one of the best early Potatoes ever grown by him. It is of medium size, oval oblong in form, very smooth, as the eyes are shallow and few in number. Color very light pink. Flesh white, fine grained and exceedingly mealy." Some of our Chicago Gardeners who have grown it for three years think it the best of the first earlies.

Per peck, 50c.; bush., \$1.75; bbl., \$4.00.

ALEXANDER'S PROLIFIC.

—We introduced this variety four years ago, and taken all in all, we still recommend it as one of the best of our entire list. Skin white, well covered with rough netting (which denotes a good cooker), eyes few, and lie even with the surface; flesh pure white, with finest flavor; fine grained, dry and floury. Being long, large and white, it brings the highest market price. A **VERY** vigorous grower, and to a great degree resists the ravages of the bugs. The tubers grow compactly in the hill, are easily harvested, and vary from medium size to very large. They are medium early and are wonderfully productive. We have never had a supply to fill the demand through the season.

Per peck, 50c.; bush., \$1.75; bbl., \$4.00.

EMPIRE STATE.—We strongly recommend this as a main crop variety. With our growers it yielded equal to any of the leading kinds, and better than most. A high recommendation for it is the fact that it will mature **two weeks** quicker than either White Star, Elephant or Burbank's, and will sell on the market for "**BURBANK'S**"—the name under which every large white variety is called when offered in Chicago to ordinary buyers. In shape it resembles the Beauty of Hebron, but is somewhat more oblong. The flesh is very white and floury, skin white and smooth, eyes shallow but strong, a single one being fully sufficient for a hill. It is medium late, ripening with its parent, the White Elephant. To get the best results, cut to one strong eye

Per peck, 50c.; bush., \$1.60; bbl., \$3.75.

BEAUTY OF HEBRON.—An early rapid growing variety—earlier than the Early Rose, and excelling it from 25 to 40 per cent. in yield. Too well known to need description. Second only to Early Ohio in popularity. We offer our early Northern Michigan grown tubers to all who desire a change of stock seed.

Per peck, 50c.; bush., \$1.65; bbl., \$3.75.

THE THORBURN.—This is a self seedling of the Early Beauty of Hebron, and in quality it is fully equal to its parent, which of itself is high praise, but it is a stronger grower, and as a field crop will yield at least a third more per acre. It is smooth and handsome, and a measured bushel will weigh from three to five pounds more than the same measure of any other variety. It is dry and floury, with a compact and fine grain. The essentials required in an early market variety are combined in "The Thorburn" Potato, such as size, beauty, table qualities, earliness and productiveness. Mr. Hathaway of Michigan in his test of several varieties of early potatoes, claims that "The Thorburn" did best for him of all the early sorts and thinks it can not be beat for quality.

Per peck, 50c.; bush., \$1.75; bbl., \$4.00.

EARLY SUNRISE.—This is a very valuable early sort, having produced tubers fit for table use in less than eight weeks from planting. Tubers of uniformly good size; shape oblong; flesh solid and fine grained, with rosy tint. Cooks dry and mealy, even when first dug.

Per peck, 50c.; bush., \$1.75; bbl., \$3.85.

GARFIELD.—Flesh pure white, fine grained and mealy, vines stocky, tubers produced closely about the root and uniformly large. Very smooth and handsome. Has been sent out under other names by some seedsmen who claim it to be a novelty of their own.

Per peck, 50c.; bush., \$1.75; bbl., \$3.85.

THE QUALITY OF OUR SEED POTATOES, grown on the DRY, SANDY SOIL of Michigan, will be found much finer than those grown on the heavy soils of Wisconsin or Dakota, and they mature much earlier.

Concave Potato Knife, postpaid 35c. Steel Wire Potato Shovel, each \$2.00; 3 for \$5.00. Potato Fork, each, \$2.25. See also Tool Pages for Paris Green, Sprinklers, etc.

Virden, Ill., Feb. 7, '88.—Many thanks for splendid catalogue just at hand. It is a work of art. I consider "Alexander's Prolific" the best potato I have grown recently; two years ago I raised 27 pounds from one small potato. C. H. Cogswell.

LEE'S FAVORITE.

CLARK'S NO. 1.

This seedling originated in New Hampshire. It is similar in appearance to the Early Rose, but is earlier, and will yield from a quarter to a third more crop. Four hundred and fifty bushels have been raised on an acre, and twenty-two bushels from one peck of seed. The tubers are large, of excellent quality, handsome in appearance, fit to dig very early, and in every way are a capital variety for either the farmer or market gardener.

Per peck, 50c.; bush., \$1.50; bbl., \$3.60.

CHICAGO MARKET.

This potato was grown from seed by Mr. D. S. Heffron, the Potato Pioneer, who introduced the Early Rose. Since its introduction, it has steadily grown in favor, and to-day stands second to few sorts in popularity. The tubers are large, uniform in size, form in clusters in the hill, are oval to round in shape, and have few and shallow eyes. The flesh is white and brittle, and cooks dry and mealy.

Per peck, 50c.; bush., \$1.60; bbl., \$3.75.

WHITE ELEPHANT.

Now one of the best known large late sorts, and still a popular one, holding its own as a market variety for general use. White skin, long, solid and grows closely in the hills, much like Late Beauty of Hebron, and about the same in season. An English grower reports a yield of seventy-eight pounds from one tuber, by greenhouse forcing. It is a splendid sort, and will give satisfaction.

Per peck, 50c.; bush., \$1.50; bbl., \$3.50.

WHITE STAR.

This fine sort, introduced five years ago, has given great and general satisfaction throughout the entire country. It is a cross between the Excelsior and White Peachblow. The tubers are oblong, large, uniform and handsome, while in yield it has proved remarkably prolific. Flesh pure white, very mealy, either baked or boiled; medium in season; a good keeper. It is a good variety for a general crop.

Per peck, 50c.; bush., \$1.50; bbl., \$3.50.

DAKOTA RED.—A late variety. Tubers long; color reddish flesh, but cooks very white; size large and uniform; eyes few and irregular—some deep, some smooth; flesh white. Vines stocky and medium in size, with deep growing roots. Our grower finds this a most remarkable yielder.

Per peck, 50c.; bush., \$1.60; bbl., \$3.75.

VICK'S EXTRA EARLY.—Our grower says this variety will justify very high praise, as an early sort of splendid quality and a prolific cropper. He was especially enthusiastic about its table quality, and its white, floury appearance when cooked. From our own tests we are satisfied that it will give the best of satisfaction, and are glad to add that the yield is satisfactory.

Per peck, 50c.; bush., \$1.60; bbl., \$3.75.

SNOWFLAKE.—In answer to numerous demands for this old favorite table potato, we have grown a few barrels of it this season. To its fine table qualities we need not refer.

Per peck, 50c.; bush., \$1.50; bbl., \$3.75.

HALL'S EARLY PEACHBLOW.—A genuine Peachblow, but much earlier. Being a new seedling, it has the vigor of original stock, and should be planted by every one who desires to grow a Peachblow potato.

Per peck, 60c.; bush., \$1.75; bbl., \$4.00.

POTATOES CATALOGUED BY US THE FIRST TIME.

POTATO, Jos. Rigault.—A new French variety, imported by us Dec. 1, 1888. Color yellowish, slightly russeted. Table quality first class, flesh white; the French introducer from whom we have imported this stock claims it to be of large size, a strong grower and very prolific, growing close in the hill.

Price, imported tubers, lb., prepaid, 40c.; not prepaid, 30c.

GOLD FLESH.—Sent out last year by a Philadelphia house who describe it as follows: "For some years they have been a favorite variety on the farms at the base of Blue Mountains; their origin is unknown. They are of good marketable size, of oblong shape. The skin is reddish, and the flesh a pure, rich golden-yellow, making a very handsome dish, especially when served as mashed potatoes; quality the very best. With us they have proved of hardy, vigorous growth and very productive. They are well worthy of general cultivation."

Per peck, 75c.; per bush., \$2.25.

EARLY STANDARD.—Highly recommended as an extra early sort. A seedling of Beauty of Hebron and White Star, it resembles in shape the former. Skin creamy white, russeted, oblong shape; large, very smooth, excellent in quality; a trifle later than Early Ohio.

Peck, 60c.; bush., \$2.00.

GOLDEN KIDNEY (New).—A seedling from Mr. Huebner, just the size and shape so popular in Germany as a table potato. Yellow fleshed, small to medium in size, and of superior quality.

Per peck, 75c.; bush., \$2.50.

BURPEE'S SUPERIOR, or Coy's No. 88.—A seedling of the White Star and said to resemble it strongly. We have not yet tested it.

Per lb., 50c.; 3 lbs. prepaid, \$1.25; per peck, \$1.25; bush., \$4.00; bbl., \$8.50.

CLARK'S NO. 1.

AMERICAN GIANT.

CHICAGO MARKET.

WHITE ELEPHANT.

WHITE STAR.

JOS. RIGAUT.

LADY FINGER.

EXTRA EARLY CAROLINA SWEET POTATO.
[1/4 NATURAL SIZE.]
AMERICAN GIANT.

One of the largest varieties in cultivation, as well as one of the most productive. It was originated in Western New York. Vines vigorous and healthy; tubers of an unusually large size; grow compactly in the hills, easily dug; cook well by either boiling or baking, of delicious flavor, pure white in color, and excellent keepers. It is a second early variety, and matures the crop about two weeks later than the Early Rose.

Per peck, 50c.; bush., \$1.60; bbl., \$3.60.

BURBANK'S SEEDLING.—This old standard is still quoted high in the market; but, as every large grower of potatoes is aware, any large, white, long potato may be sold on the market for Burbank's. However, in response to repeated calls, we secured and planted the genuine stock, and offer the northern grown seed as follows:

Per peck, 50c.; bush., \$1.50; bbl., \$3.75.

MANMOTH PEARL.—White, roundish, medium in season, very handsome, and of unexcelled productiveness; vines short and thick. The tubers are of good large size. This has been from its introduction a most popular kind, evincing its genuine merit. It is a standard potato in many sections. Its table quality is not the best. We offer our Northern stock as follows:

Per peck, 60c.; bush., \$1.50; bbl., \$3.50.

LADY FINGER.—Although this variety has been in cultivation for many years, it is comparatively but little known. To those who are acquainted with it, it is unnecessary to say anything in its favor; but to those who have not tasted a baked "Lady Finger," we would say that they have a rich treat in store for them if they will test this variety.

Per peck, 65c.; bush., \$1.75; bbl., \$4.00.

QUEEN OF THE VALLEY.—One of the most prolific varieties in cultivation. Season medium; tubers very large, hardly any small ones, shape long, flattened, somewhat square cut at the ends; color deep pink at the seed end, gradually changing to almost white at the stem end, cooks mealy without falling into pieces. Its only fault as a table potato might be found in its enormous size, but its immense productiveness still makes it a very profitable kind to grow.

Per peck, 60c.; bush., \$2.00; bbl., \$4.50.

VANGUARD.—This is claimed to be one of the very earliest, though not so prolific as some. The type is like the Early Rose, with few shallow eyes; flesh white and mealy, and of good quality and flavor.

Per peck, 50c.; bush., \$1.75; bbl., \$4.00.

CHARLES DOWNING.—A very early, oval, white potato, of fine table quality. Our crop was so poor this season, that we cannot recommend the sort as a yielder. Others of our customers verify the report, we therefore do not recommend it.

Per peck, 50c.; bush., \$1.50; bbl., \$3.50.

POTATO SEED (French Imported).—Mr. D. S. Heffron, the well-known hybridizer, informed us that he succeeded in growing 150 tubers from one plant of our seed the first summer.

Early sorts, pkt., 25c.; late sorts, pkt., 25c.

POTATO SEED (Best American).—Hybridized seed, mixed, from two best growers in the U. S. Pkt. 25c.

OTHER POTATOES not Catalogued here. We have arrangements made with several reliable growers by which we can supply nearly all the old and popular varieties that have been grown the past 50 years—not novelties of 1888-89. We will furnish 1 lb. for 40c., or 3 lbs. for \$1.00, of any kinds, also pecks at 50c. each, and full barrels at \$4.00 each. No order taken for less than \$1.00. Orders for these should be on a separate sheet from our regular orders.

♦ SEED SWEET POTATOES ♦

(These should never be shipped except in boxes or bbls.)
Write for special prices on large lots.

Grown, stored and handled especially for seed purposes. They are grown in this State, but we can also supply New Jersey stock of Yellow Nansmond at 50c. per barrel advance. None shipped until about planting time. We notify all who request it as soon as potatoes are ready for shipping. The following varieties are kept in stock.

Yellow Nansmond, Southern Queen, Red Nansmond, Bermuda.

Per bush., \$2.00, packed in box, 25c. extra; 1-2 bush., packed in box, \$1.25; bbl., \$4.50; 3 bbls., \$13.00.

NEW SWEET POTATO, EXTRA EARLY CAROLINA.

A very superior sort in earliness, productiveness and quality. Of a bright yellow color, shape as per photograph, much nearer the Irish potato than usual with Sweet. It is so early as to be especially desirable for all Northern sections.

Per peck, \$1.00; 1-2 bush., \$1.75; bush., \$2.75; bbl., \$6.50.

"DER DUMMSTE BAUER ZIEHT DIE DICKSTEN KARTOFFELN."

We are Chicago Agents for the Wilson Bone Mills, the best machines for crushing oyster shells, dry and green bone, and all kinds of grain.

GOLDEN UPRIGHT PEPPER.

RED CLUSTER PEPPER.

BELL, OR BULLNOSE.

CULTURE.—Pepper is highly valued for its pungent flavor, and is used in seasoning soup, meats, etc.; also used for pickles and mangoes. Sow in a hot bed in April and transplant to open ground in warm settled weather to rows 2 feet apart and 18 inches in the rows. Or, when all danger of frost is passed, sow at once in open ground, and thin to same distance as above. Any rich fertilizer or bird manure, if applied and stirred into the soil when the plants are 6 inches high, will be of great benefit. Hoe frequently. One oz. will produce 2,000 plants.

LARGE BELL.—Large and early, rind very thick, color glossy red, flavor mild and pleasant. Extra choice stock; you will find few better kinds of pepper to stick to than this. Pkt. 5c.; oz. 30c.; ¼ lb. \$1.00.

Coral Gem.—See novelties.

SWEET MOUNTAIN.—Resembles Bell in size and color, but is of milder flavor. Pkt. 5c.; oz. 30c.; ¼ lb. \$1.00; lb. \$3.50.

GOLDEN UPRIGHT.—Produces the fruits UPRIGHT on the stems. The fruits are large and FULLY DOUBLE THE SIZE of Golden Dawn, and of a beautiful rich golden yellow, tinged with blush-red where exposed to the sun. The peppers are mild and as pleasant to the taste as Ruby King. Pkt. 10c.; oz. 30c.

Celestial.—A very showy plant and a most desirable Pepper. The plant begins to set its fruits early in the season and continues until frost, branching freely and bearing profusely. The peppers, when young, are delicate creamy yellow and ripen to a vivid scarlet, making a plant, when loaded with fruit part of one color and part of the other, an object of the most striking beauty and oddity. They are from 2 to 3 inches long, of clear sharp flavor, and superior for any of the uses to which a Pepper can be put. Pkt. 10c.; 3 for 25c. Don't fail to add this to your order.

CELESTIAL PEPPER.

RUBY KING.—Grows 4½ to 6 inches long by 3¼ to 4 inches thick. A beautiful, bright ruby red color, and remarkably mild and pleasant to the taste. Pkt. 10c.; oz. 40c.; ¼ lb. \$1.25.

RED SQUASH, or Tomato Shaped.—Flesh very thick; fruit round, smoother and of milder flavor than the old varieties. Pkt. 10c.; oz. 30c.

GOLDEN DAWN.—This new handsome kind is one of the most ornamental and desirable sorts. It is a beautiful golden yellow, quite sweet, without any fiery taste; very productive. Pkt. 5c.; oz. 30c.

RED CLUSTER.—A French variety, a sport of the Chili Pepper, which it resembles; the leaves, however, are smaller, and so are the fruits. The latter are curiously crowded together on the top of each branch; they are rather thin, and of a very conspicuous coral red color, very pungent. Pkt. 10c. 3 for 25c.

Spanish Monstrous.—Very large single peppers, often growing six to eight inches long and two to three inches thick; early and most productive; flesh very sweet and mild. Pkt. 5c.; oz. 30c.

Cayenne Long Red.

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

Cherry Red.—Fruit small, red, round, and very hot. Pkt. 5c.; oz. 25c.

CAYENNE PEPPER.

Wauconda, Ill., March, 24, '88.—I have received your handsome Catalogue and would like to try some of the seeds, as I have heard yours spoken of as far ahead of others,

MRS. NICHOLAS SMITH.

PARSLEY.—PETERSILIE.

CULTURE.—Parsley is used for seasoning soups, meats, etc., for salads and garnishing and as an ornamental border in the flower garden. Since the seed germinates very slowly, the plants sometimes not appearing for three or four weeks, sow as early as possible and soak the seed a few hours in luke-warm water before sowing. Sow thickly in rows 1 foot apart, and cover ½ inch deep. Thin out to 6 inches apart in the rows, or, better still, transplant and cut back. The finest and most perfect leaves come from frequent transplanting and cutting back. One ounce of seed sows about 140 feet of drill.

Packet, 5c.; oz., 10c.; for any kind except where noted.

CHAMPION MOSS CURLED.

DOUBLE CURLED.—Finely curled dwarf. ¼ lb., 30c.; lb., 90c.

CHAMPION MOSS CURLED.—A very fine English sort, leaves beautifully curled and mossy; a very handsome standard sort. ¼ lb. 30c.; lb. 90c.

Fern-leaved.—A most valuable plant, both for table decoration and mixed with dwarf ornamental foliage plants in the flower garden. ¼ lb., 30c.

Plain.—Longer than curled sorts and stronger in flavor. ¼ lb., 20c.; lb., 60c.

Hamburg Rooted, Long.—Large; fine for flavoring; also called German Parsley. ¼ lb., 30c.

Hamburg Rooted, Short.—Round. ¼ lb., 30c.

Hamburg Rooted, Glory of Erfurt.—This new kind combines the qualities of the Hamburg Rooted Parsley, with the very double curled leaves which render it equally valuable, both for cutting in Summer, and if planted in boxes, in Winter. Pkt., 10c.

PUMPKIN.

CULTURE.—These are easily grown and are profitable for stock feeding. At time of corn planting scatter a few seeds in every fourth or fifth hill, or for a large crop sow in May, in good warm soil in hills 8 to 10 feet apart each way.

4 plants to a hill. Avoid planting near other vines as they will hybridize. One ounce will plant 15 hills.

Per pkt., 5c.; oz., 10c. except where noted.

LARGE FIELD.—Standard sort for field culture. ¼ lb., 15c.; lb., 35c. By express, 6 lbs., \$1.00; 25 lbs., \$3.00.

Large Cheese.—Cheese shaped, in flavor like the Crookneck squash; yellow fleshed, fine grained and very productive; superior to most field varieties. ¼ lb., 30c.

Large Tours or Mammoth French.—Often weighs over one hundred pounds; flesh is of a salmon color and keeps well. ¼ lb., 25c.; lb., 75c.

Cashaw.—Very large, one of the best; weight, sixty to eighty pounds, flesh yellow and solid, productive and a good keeper. ¼ lb., 25c.; lb., 75c.

Sugar.—A small orange colored sort, remarkably sweet, fine grained and dry. Keeps well and cannot be beaten for table use. ¼ lb., 25c.; lb., 75c.

RED ETAMPES MAMMOTH.—Skin smooth, bright glossy red, flesh deep orange, very thick and of superior quality. Matures early and attains an immense size. Pkt., 5c.; oz., 15c.; ¼ lb., 50c.; lb., \$1.50.

FIFTY DOLLAR PRIZE.—See novelties.

Grey Boulogne.—Shape round, flattened. Skin greyish green, slightly netted; flesh golden yellow, dry and of excellent quality. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.15.

REMEMBER THAT MANGELS AND CARROTS ARE THE MOST PROFITABLE CROPS FOR THE DAIRY FARMER TO RAISE.

NOTE—We combine with our seeds, plants and flowers, all tools needed, that our customers may obtain from us a COMPLETE OUTFIT in one shipment, saving much in transportation charges. No charge for packing, boxing or delivery to depot.

**JAPANESE
PIE PUMPKIN.**

Mammoth Potiron.—True. This largest of all pumpkins has reached the enormous weight of 226 pounds. It is round, and flattened at both ends. The flesh is of a bright orange, fine grained and firm; quality excellent; skin of a light salmon color. A very handsome sort, unequaled for exhibition purposes. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.50.

**QUAKER
PIE PUMPKIN.**

Sweet Potato Pumpkin.—A new pear-shaped pumpkin, creamy white in color, sometimes striped with green; size medium; flesh creamy white, fine grained, thick, dry and brittle; flavor of the best. For cooking purposes it has no equal, and is popular wherever known. Pkt., 10c., oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.

QUAKER PIE PUMPKIN.—This very distinct and valuable variety hails from Washington County, N. Y., where for many years it has been in the possession of a family of "Quakers" or Friends. It is oval in shape and tapers toward each end. It is of a creamy color both inside and out. Being FINE GRAINED and RICH FLAVORED, it makes a superior quality of pies. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Banana Pumpkin, or Custard Squash.—Form ribbed, color creamy white with light yellow flesh, of particularly good quality for pies. Pkt., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.

Dunkard Winter.—Orange yellow, lightly striped outside, with deeper yellow, fine grained thick flesh and a great keeper. Pkt., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.

Black Sugar, (Negro or Nantucket Pie Pumpkin.)—It is oblong or bell-shaped and ribbed, the outer color of the skin dark green—almost black. The flesh is orange; it is a splendid pie pumpkin. It keeps well through the winter. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Japanese Pie Pumpkin.—The flesh is very thick, nearly solid, unusually fine grained, dry and sweet, resembling sweet potatoes in taste. They ripen early and keep well. The seeds are very curiously marked. Pkt., 10c.; oz., 25c.; $\frac{1}{4}$ lb., 60c.; lb., \$2.00.

Mixed, Largest Varieties.—Assorted in one package. Pkt., 10c.

Mixed.—All varieties named above, in one large package, 20c.

RADISH.

If ordered by freight or express, deduct 8 cents per pound from Prices quoted.

CULTURE.—Radishes delight in light, rich, mellow soil, and, to be crisp and tender, must make rapid growth. For very early use, sow on a gentle hot bed in January, and continue sowings every two weeks until September, choosing the varieties suited to the season. Sowings should be made in drills ten inches apart, and the plants should be thinned to two inches apart in the row. Sow Winter Radishes in July, and take up before severe frosts and store in sand or earth in a cool cellar.

We carry the largest variety of Radish Seeds (grown especially for us under contract), in the country. Besides this general list, see also our novelty pages.

The letters given with the names of varieties refer to the form shown in the engraving which the variety most resembles. While growing, slug shot will prove an effectual remedy against the black fly.

White Pigeon, Mich., March 15, '88.—A neighbor told me this week that he was going to send for a few seeds, and I told him to send to J. C. Vaughan, if he wanted to deal with an honest man. Thos. Timmis.

Five pound lots of any variety at 10 cents less per pound. Packets of any variety, 5 cents each.

EARLIEST AND FORCING VARIETIES.

See novelties for

EXTRA EARLY FORCING RADISHES.

a. EARLIEST CARMINE ERFURT.—

The earliest sort, turnip-shaped; color fine carmine; it is remarkably mild, crisp and tender; has very short top, and cannot be too highly recommended for early forcing. Oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 80c.

a. NON PLUS ULTRA, (New).—This is a turnip

sort of fine round form, bright scarlet color, of tender flesh and delicate flavor; its remarkably quick growth and very short top render it specially valuable for forcing. Oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

c. EARLIEST OLIVE, DEEP SCARLET SHORT TOP.—A new and very distinct type of the well-known olive shaped radish,

which is of perfect form—smooth skin, fine color and has very short leaves. This, combined with its extremely quick growth, taking only three weeks to mature, renders it extraordinarily valuable for forcing, while it does equally well in the ground. The flesh is pure white, crisp and of very pleasant taste. A great favorite with gardeners at Chicago. Oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

b. SCARLET GLOBE.—Not new, but a most desirable turnip sort for hot-bed forcing; very early and in flavor mild, crisp, juicy and tender. Top small and will stand the heat well without becoming pithy. Good for garden as well as forcing. Oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

**Types
of Radishes** Vaughan
Chicago.

SCARLET GLOBE RADISH.

e. Olive Shaped White.—Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

e. Olive Shaped Early Rose.—Oz., 10c., $\frac{1}{4}$ lb., 20c.; lb., 60c.

h. LONG SCARLET SHORT TOP.—Standard long variety for market and home gardens. Root is long, growing half above ground, straight, smooth and of a rich scarlet color, very crisp, quick grower. Best seed of this important sort. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 55c.

c. Half Long Deep Scarlet.—A desirable early sort; a trifle longer than the olive shaped sorts. Oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 65c.

g. WOOD'S EARLY FRAME.—In shape and color similar to Long Scarlet; though not quite so long, it is, however, fully 10 days earlier; top very small; a very desirable forcing variety. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

d. French Breakfast.—A popular, very quick growing variety for early forcing, oval in shape; color scarlet, tipped with white; very crisp and tender. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

a. Early Scarlet Turnip.—The standard variety. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 70c.

b. EARLY DEEP SCARLET.—Smooth skin; rich deep red color; small top; extra early; one of the finest market sorts. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

b. White Turnip.—Like above, but white. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 60c.

b. SCARLET TURNIP, White Tipped.—A very attractive variety; a favorite with Chicago gardeners. Oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 65c.

e. OLIVE SHAPED DEEP SCARLET.—Very early, oblong in shape, skin scarlet, flesh rosy and tender. An excellent gardeners' sort for early forcing. Oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 65c.

RADISHES--Continued.

SUMMER VARIETIES.

- i. **IMPROVED CHARTIER.**—One of the most distinct varieties. Color scarlet at top, shading to pink at centre, and white at tip. It is very crisp, tender, and of mild and pleasant flavor. Oz., 10c.; ¼ lb., 25c.; lb., 65c.
- g. **Long White Vienna.**—New. One of the finest of long white Radishes; snow white; very brittle and crisp. Oz., 10c.; ¼ lb., 30c.; lb., \$1.00.
- h. **Long White Naples.**—A mild-flavored, long white sort, good for Summer and Fall use. Oz., 10c.; ¼ lb., 30c.; lb., \$1.00.
- j. **EARLY WHITE GIANT STUTTGART.**—An early and remarkably quick growing variety of large size; flesh and skin pure white, crisp and of excellent flavor, turnip-shaped; withstands the severest heat. Oz., 10c.; ¼ lb., 25c.; lb., 75c.
- i. **LONG WHITE STRASBURG or HOSPITAL.**—A white variety, large and showy, half long in shape, a leading sort in the Chicago market; it matures quickly, sometimes in six weeks, and holds its table qualities well. It is commonly sold when six to seven inches in length, and then has a diameter of nearly two inches in the upper third of its length, from which it tapers rapidly to a point. Oz., 10c.; ¼ lb., 25c.; lb., 75c.
- k. **THE SHEPHERD RADISH.**—Bright pink color; long and smooth; always sweet and tender; a splendid family and market Radish. Grows 15 or 20 inches long and 2 inches in diameter, and remains sweet and tender. Is good for Spring, Summer and Fall. Oz., 10c.; ¼ lb., 30c.; lb., 90c.
- j. **Black Summer Turnip.**—An excellent variety for Summer growing as it endures the heat well; is of quick growth and good quality. Oz., 10c.; ¼ lb., 25c.; lb., 75c.

- f. **Grey Summer Turnip.**—Withstands the Summer heat; upper part of root wrinkled, often lined with white. Oz., 10c.; ¼ lb., 25c.; lb., 80c.
- j. **Yellow Summer Turnip.**—A large-growing yellow Radish, which withstands Summer heat and drought, a quick grower and great favorite with market gardeners. Oz., 10c.; ¼ lb., 25c.; lb., 80c.
- j. **GOLDEN YELLOW SUMMER TURNIP.**—An improvement on the above; bright golden yellow color, small leaves; very early, often being fit for use four weeks after sowing. Oz., 10c.; ¼ lb., 25c.; lb., 70c.

WINTER VARIETIES.

- CHINESE MAMMOTH RADISH.**—Genuine imported Chinese grown seed. This immense Winter Radish is grown by the Chinese gardeners, and is one of the largest in cultivation. The flesh is white and solid, and flavor excellent. True imported seed. Pkt., 10c.; oz., 35c.
- m. **California Mammoth White Winter or Large Russian.**—Growing to immense size, flesh solid, white and of good flavor. Oz., 10c.; ¼ lb., 30c.; lb., \$1.10.
- d. **Scarlet China Winter.**—A good winter sort; sow in summer, same as turnips; flesh white and quite pungent. Oz., 10c.; ¼ lb., 25c.; lb., 75c.
- f. **Round Black Spanish.**—Round and firm; flesh white and very appetizing; a good keeper. Oz., 10c.; ¼ lb., 20c.; lb., 65c.
- l. **Long Black Spanish.**—Large, skin black, flesh firm and white; milder than the Round. Oz., 10c.; ¼ lb., 20c.; lb., 65c.
- d. **China Rose Winter.**—Skin bright rose color; size medium, quality excellent; one of the best sorts for winter use. Oz., 10c.; ¼ lb., 25c.; lb., 75c.
- l. **White Spanish Winter.**—Similar to above. Oz., 10c.; ¼ lb., 25c.; lb., 75c.

CHICAGO ORANGE MARROW SQUASH.

RED CHINA SQUASH.

BAY STATE SQUASH.

SQUASH.

Per packet 5 cents, except where noted.

CULTURE.—Plant when weather is warm and settled, in richly manured hills, 3 to 4 feet apart for the bush varieties and 6 to 9 feet for the running sorts. Sow 8 to 10 seeds to the hill, thinning to 3 plants when danger from bugs is past. Three ounces will sow 100 yards. 4 to 6 pounds are required per acre.

NEW EGG PLANT SQUASH.—Derives its name not only from the shape which resembles an Egg Plant, but also from its peculiar cooking qualities, as it is delicious when fried. It is a very early sort, white fleshed; the rind is a mottled grey, turning to a buff color when ripe. Pkt., 5c.; oz., 15c.; ¼ lb., 50c.; lb., \$1.75.

Red China.—This new sort, imported from China, is smaller than most other squashes, averaging two to three pounds in weight. They are of a bright red color, marked longitudinally with yellow and dark green. The flesh is yellow, firm, floury and sweet. It is extremely prolific, each plant bearing ten to twelve squashes. They ripen very early and are excellent keepers. Oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

BAY STATE.—The excellent features of this new variety are its extreme solidity, heavy weight, fineness and dryness of grain, and sweetness of flavor. It appears a trifle earlier than the "Essex Hybrid," the crop averaging smaller in size and more in number, making the productiveness in weight about the same. It also possesses an extremely hard, flinty shell, thus giving assurance of being an excellent keeper. The color of the shell is blue, shaded with a peculiar greenish tinge. The flesh, however, is of a beautiful bright golden yellow, very handsome and attractive in appearance and exceedingly sweet and tender in quality. The average weight of the squash is about ten pounds. Oz., 15c.; ¼ lb., 40c.; lb., \$1.30.

White Bush.—Light cream-colored, scalloped; very early and productive grows to a good size and is the best for early market and shipping. Oz., 10c.; ¼ lb., 25c.; lb., 70c.

LARGE GOLDEN BUSH.—(GARDENERS' SELECT STOCK). Early, pale yellow, very handsome and uniform. Our strain of this is the best of all the very early squashes. Oz., 15c.; ¼ lb., 35c.; lb., \$1.15.

Yellow Bush.—Like the above, differing in color. The old standard strain. Oz., 10c.; ¼ lb., 25c.; lb., 70c.

Summer Crookneck.—Early and prolific; quality good, skin yellow and warty; fine for summer. Oz., 10c.; ¼ lb., 25c.; lb., 70c.

Cocoanut.—An excellent and beautiful little squash for table use; very prolific, yielding from six to a dozen to the vine. The color is an admixture of cream and orange, while the bottom is of a rich grass green. The flesh is fine-grained, sweet and very solid and the quality excellent. It will give a crop when all the standard sorts fail. Oz., 15c.; ¼ lb., 30c.; lb., \$1.00.

Brazilian Sugar.—A new variety from South America; rapid grower; flesh rich, dry, very sweet and fine grained, flesh and skin bright yellow. They ripen early and reach a weight of 5 to 6 pounds. This is the richest flavored and sweetest of all squashes. Oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Sibley, or Pike's Peak and Woodbury.—See novelties.

Essex Hybrid.—A new, medium late sort, one of the richest flavored, finest grained and sweetest of all the squashes, and an excellent keeper, very early and of quick growth. Oz., 10c.; ¼ lb., 25c.; lb., 90c.

American Turban.—A fall sort of extra quality; flesh thick and deep yellow, skin greenish, striped white. Oz., 10c.; ¼ lb., 25c.; lb., 75c.

FREE BY MAIL: Please bear in mind that our rates for Pounds, Pints and Quarts, include prepayment by mail.

CHICAGO ORANGE MARROW.—This selection from the Boston Marrow was first introduced by us in 1882, and has met with general approval. Its distinctive feature and the one which will give it the greatest and most wide-spread popularity, is its earliness—it is at least ten days earlier than any other long-keeping sort. It grows as long as the Hubbard and is of as good quality. It is in season from September to January, and is the most salable kind during that time in the market; this is owing to its smooth handsome shape, good size and creamy orange skin. Gardeners should try it. **Selected Seed**—Pkt., 5c.; oz., 10c.; ¼ lb., 40c.; lb., \$1.50. **Ordinary Seed**—Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 90c.

HUBBARD.—Few seedsmen that have not the PUREST Hubbard squash in existence, while in reality absolute purity is very difficult to attain. Our seed is from squashes grown especially for seed and that have been grown and carefully selected for the last ten years; therefore we claim the BEST STRAIN in the market. Give it a trial. Oz., 10c.; ¼ lb., 25c.; lb., 80c.

Marblehead.—A winter sort resembling the Hubbard, but with harder shell and bluish color; very solid and heavy. Oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Canadian Winter Crookneck.—Prolific and of good quality. Oz., 10c.; ¼ lb., 25c.; lb., 90c.

BUTMAN.—Claimed by acknowledged authority to be "the only American Squash and best ever grown." Oz., 10c.; ¼ lb., 25c.; lb., 85c.

NEW OLIVE.—A fine new Winter Squash; olive shape and color, smooth skin, flesh thick, firm and mealy, golden yellow color. Oz., 10c.; ¼ lb., 30c.; lb., \$1.

WHITE PINEAPPLE, or White Turban.—A new variety, similar in season to the Perfect Gem and very attractive on account of its peculiar shape, fine-grained creamy flesh and delicate cocoanut flavor. It is a strong grower, keeping well after maturing, while the squashes are fit for use at any time during growth. Oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Boston Marrow.—A standard sort of fine quality, rich orange color and splendid keeping qualities. Oz., 10c.; ¼ lb., 25c.; lb., 80c.

MAMMOTH CHILI.—The largest of all Squashes, often attaining a weight of two hundred pounds, without losing its fine shape and good quality. The flesh is very thick, of a bright orange color and keeps well throughout the winter. It is very productive and will be found very profitable for stock feeding. Pkt., 10c.; ¼ lb., 50c.; lb., \$1.75.

VALPARAISO.—A South American variety. It is of very large size, enormously prolific, of excellent quality and also very profitable to grow for feeding purposes. Oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Dunlap's Prolific Orange Yellow.—A grand improvement on the Boston Marrow, in regard to earliness, productiveness, and good keeping qualities. It is of medium size, flesh dry, fine grained, orange colored, and of rich flavor. A very quick growing sort. Oz., 10c.; ¼ lb., 30c.; lb., \$1.

New Prolific Sugar.—This new squash ripens early and continues in bearing until killed by frost; the rind is a dark cream color, smooth, slightly ribbed, flesh light cream, enormously prolific. Oz., 15c.; ¼ lb., 50c.; lb., \$1.50.

PERFECT GEM.—A new strong-growing, prolific squash, excellent for either summer or winter use. Fruit four to six inches in diameter, creamy white, with thin, smooth shell, somewhat ribbed; quality excellent; keeps well. Oz., 10c.; ¼ lb., 25c.; lb., 80c.

Vegetable Marrow.—A favorite English sort, with greenish-yellow skin, white flesh of rich flavor. Pkt., 5c.; oz., 20c.; ¼ lb., 60c.; lb., \$2.00.

EXTRA LARGE ROUND LEAVED SPINACH.

SALSIFY, (Vegetable Oyster).—HAFFER-WURZEL.

Sow early in Spring in drills 15 inches apart and 1 to 2 inches deep, thin to 6 inches apart. Soil should be very deep and mellow, in order that the long root may grow straight down. Store same as Carrots for winter use, or they can be left in the ground until Spring. One ounce of seed will sow about 50 feet of drill.

Vegetable Oyster.—The standard variety. Pkt., 5c., oz., 15c.; ¼ lb., 40c.; lb., \$1.50.

Mammoth Sandwich Island.—See novelties. Pkt., 10c., ¼ lb., 75c.; lb., \$2.60.

SCORZONERA.—(OR BLACK SALSIFY).

Treatment same as for Salsify, which it closely resembles except that the skin is black. Soak in cold water a few hours before cooking, to remove the bitter taste. One ounce will sow 50 yards.

Long Black.—Pkt., 5c.; oz., 15c.; ¼ lb., 40c.

SORREL.—SAUERAMPFER.

Cultivate like Spinach. The leaves are much esteemed for their pleasant flavor, and are used in salads or cooked like Spinach. One ounce of seed will sow 50 yards.

Broad Leaved French.—Pkt., 5c.; oz., 15c.

TURNIP.—WEISSE RUEBEN.

CULTURE.—For early use sow the small sorts as soon as the ground can be worked in the spring, in drills 14 inches apart, the Rutabagas 30 inches. As the seed is very fine, it should be covered but slightly, excepting in very dry weather. Of the early varieties thin the plants to 6 inches apart, and the Swedes to 1 foot. For fall and winter use, the early kinds should be sown from the middle of July to the middle of August, and the Swedes from the middle of June to the first of July.

Per packet of any variety, 5 cents.

Extra Early Red Top Milan.—The earliest in cultivation, two weeks earlier than Purple Top Strap Leaf. The bulb is flat, of medium size, quite smooth with a purple top. Flesh white, hard and of finest quality; it is an extra good keeper. Oz., 10c.; ¼ lb., 20c.; lb., 65c.

EARLY PURPLE TOP MUNICH.—The earliest variety after the Red Top Milan. Good quality and shape. Color white with purplish-white top; very productive. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

EARLY RED OR PURPLE TOP.—Strap leaf. Oz., 10c.; ¼ lb., 15c.; lb., 45c.

White Egg.—Large, early, solid, good flavor. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

SWEET GERMAN.—A well-known white, sweet variety; excellent keeper; sow early in June. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

LONG COWHORN.—Carrot-shaped sort; very rapid grower of delicate flavor; excellent for table use. An excellent variety for the market or home garden. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

Yellow Aberdeen.—Globe shape. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

Robertson's Golden Ball, or Orange Jelly.—Rich, sweet; of quick growth; excellent for table and stock. Oz., 10c.; ¼ lb., 15c.; lb., 50c.

PURPLE TOP GLOBE.—An improved variety of Red Top Flat Strap. As early, but globular in shape, keeps well and is desirable for table or stock. Oz., 10c.; ¼ lb., 20c.; lb., 60c.

Jersey Lily.—White, round, extra early and of good flavor. Has single tap root and small top. Oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Small Berlin, or Teltau.—The smallest sort, of excellent flavor. Oz., 10c.; ¼ lb., 20c.

Grey Morigny.—Sweet, white flesh, shape long. Oz., 10c.; ¼ lb., 20c.; lb., 90c.

WHITE FLAT DUTCH.—A popular well-known early sort; fine for table use when young. Oz., 10c.; ¼ lb., 20c.; lb., 50c.

Pomeranian White Globe.—A medium early, productive, hardy, good for stock feeding. Oz., 10c.; ¼ lb., 20c.; lb., 45c.

SWEDES, OR RUTABAGAS.

Laing's Swede.—One of the earliest; good quality, fine for table use, a good keeper. Oz., 10c.; ¼ lb., 15c.; lb., 50c.

Carter's Imperial Swede.—Yellow-fleshed, purple-topped variety, growing to large size; for table or stock. Oz., 10c.; ¼ lb., 20c.; lb., 45c.

American Rutabaga.—Good for table use or stock, yellow-fleshed, called "the best of all Rutabagas." Our seed is from an experienced American grower, who makes a careful selection. Oz., 10c.; ¼ lb., 15c.; lb., 50c.

Skirving's Rutabaga.—Enormously productive. Flesh yellow, solid and sweet. One of the best for field culture. Oz., 10c.; ¼ lb., 15c.; lb., 50c.

White Swede.—Large white; solid and sweet. Oz., 10c.; ¼ lb., 15c.; lb., 50c.

RHUBARB.—RHABARBER.

Sow in April in drills 1 inch deep and 1 foot apart; when the plants are 3 to 4 inches high, thin out to 10 inches apart and cultivate well during the season; in the Fall or following Spring, transplant into hills about 3 feet apart each way. The soil must be very deep and heavily manured. Give a top dressing of manure every fall. One ounce of seed will produce about 1,000 plants.

Victoria.—Large and tender. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Linnaeus.—Well known market variety; early. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

RHUBARB ROOTS.

Set in Spring and they will be ready the following season.

VICTORIA.—Per dozen, not prepaid, \$1.00; each, 10c.

SALSIFY.

PURPLE TOP GLOBE.

LONG STANDING SPINACH.

SPINACH.

Select VERY RICH, well-drained soil, and sow in drills 1 foot apart and 1 inch deep. For Spring and Summer use, make the first sowing early in March, and continue at intervals of 2 or 3 weeks until the middle of July. Sow in August or September for Winter and early Spring use, and protect with a covering of straw during severe weather. One ounce will sow 100 feet of drill. 10 to 12 lbs. are required for an acre. Special prices on large lots.

EXTRA LARGE ROUND LEAVED.—Our stock is very fine. Oz., 5c.; ¼ lb., 15c.; lb., 30c. By Express, 10 lbs., \$1.50.

Prickly Seeded.—Very hardy, good for winter planting. Oz., 5c.; ¼ lb., 15c.; lb., 35c.

LONG STANDING.—New. Slow going to seed. Oz., 5c.; ¼ lb., 15c.; lb., 35c. By Express, 10 lbs., \$1.50.

Lettuce-Leaved.—A new, very prolific sort, slow running to seed. Oz., 5c.; ¼ lb., 15c.; lb., 35c.

Tetragonia or New Zealand.—Makes a large plant; stands heat and drought and can be cut all Summer. Oz., 10c.; ¼ lb., 25c.; lb., 75c.

Viroflay.—Quick, strong growth; much used by New York truckers. Oz., 5c.; ¼ lb., 15c.; lb., 35c.

PEDIGREE TOBACCO SEED.

We offer the following list of Tobacco seeds, all of which have been carefully grown, on crown shoots only, are true to name and of best vitality. Prices include postage. The first three are newest sorts.

Prices for all varieties:

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

PRIMUS.—Leaves large, fibres fine and texture silky. Yields big crops of extra fine quality. Suited for manufacturing or cigars. New and scarce.

HARBY, New.—A Turkish variety which stands heat and drought beyond all others, and may be topped to 25 leaves or more. Superior to Latakia, and possesses a very agreeable odor and flavor.

BRAZILIAN-AMERICAN.—The finest Brazilian strain acclimated. Makes fine cigars and delightful aromatic pipe-smoking tobacco. Try this.

Big 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, whilst its earliness makes it most desirable for high latitudes. Best Americanized Havana.

General Grant.—One of the finest, earliest and most popular kinds for cigars; grows more in demand every year.

Big Oronoko.—An old variety and a good one. Has a large, broad, finely-shaped leaf, and for strips and dark wrappers, has no equal.

Connecticut Seed Leaf.—The two largest, finest and best strains of this indispensable kind. Every seed-stalk carefully selected.

HOCKANUM and MAMMOTH, either sort, at prices as above.

Caboni.—A Spanish variety of superior quality and promises to prove a popular cigar variety.

COLLECTION.—Eight above kinds, one ounce of each, postpaid, \$1.50; 1 pkt. each, 35c.

Havana, Ill.—Our seeds were all right. We had good vegetables and beautiful flowers. Mr. Bowman thinks the New Iron Frame Cultivator a perfect jewel.
 Mrs. J. K. P. Bowman.

NOTE.—We combine with our seeds, plants and flowers, all tools needed, that our customers may obtain from us a COMPLETE OUTFIT in one shipment, saving much in transportation charges. No charge for packing, boxing or delivery to depot.

CONN. SEED LEAF TOBACCO.

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 BY J. C. VAUGHAN

We can especially recommend our stock of Tomato seeds here offered. They have been grown especially for us from the best of seed stocks by a very careful grower of 20 years experience, who thoroughly understands this branch of the seed business, and we are confident that no better seed can be obtained.

CULTURE.—Sow the seed in March or April in the hot-bed, or in a box in a sunny place in the house. To make very healthy, stocky plants, they may be transplanted when about two or three inches high. When five or six inches high, if the ground has become warm, transplant to the open ground. Set plants four feet apart.

NEW TOMATOES.

There are more candidates for public favor in new Tomatoes every year than for a paying political office and it would take 3 pages of our book to describe them. To save time and space we have decided to make this proposition. We have secured seed of every new Tomato that we know of for 1889 and all novelties of the past three Seasons and now offer as follows:

One packet of 10 kinds new tomatoes for 50c.
One " " 20 " " " \$1.00.
One " Mixed from all above kinds " 25c.
The Dollar Collection is a great chance.

TURNER'S HYBRID.

ADVANCE.—A new EXTRA EARLY seedling from Alpha and Perfection; has ripened in 90 days; the tomatoes are of medium size, round and very solid, with no green core; skin smooth and bright red. We recommend it to gardeners, as our test has shown it to be the first and one of the best for market. **WE OFFER HEADQUARTERS SEED, ESPECIALLY SELECTED BY THE ORIGINATOR.** Pkt., 10c.; oz., 75c.

ALPHA.—Now quite well known as one of the very earliest; is apt to be rough if highly fertilized. Our seed has been selected from the very earliest Tomatoes. Pkt., 10c.; oz., 50c.

Early Conqueror.—Vines medium size, vigorous and productive; very early and popular for first crop. Pkt., 5c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.75.

CANADA VICTOR.—Very early. Selected seed, taken from the very earliest tomatoes in a large field. Pkt., 15c.; oz., \$1.00.

TURNER'S HYBRID.—A variety

of recent introduction, remarkable for the great size and solidity of its fruit. The tomatoes average in weight 12 to 18 ounces, and in diameter 4 to 4½ inches; they are entirely free from green core, and are extremely solid, containing very few seeds. The shape is round and even, but somewhat irregular in the very largest fruits; color bright red, skin smooth and thin, but very tough, making it a good shipping sort. The flavor is unsurpassed, and its solidity and evenness of flesh render it one of the handsomest tomatoes for slicing. In addition to the above good qualities, it is very productive, and will outyield all other varieties. We recommend it to all our customers. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.40; lb., \$4.50.

Potato Leaf.—This is a mammoth variety, like Mikado and Turner's Hybrid, but a very careful test shows it much smoother and as good in other ways. We recommend it. Pkt., 10c.; oz., 50c.

Cardinal.—New early sort of brilliant cardinal color; flesh deep red with no green core, firm and solid; it is round, smooth and handsome and ripens uniformly. Pkt., 5c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

Hovey.—Remarkably fine, resembling Acme, but earlier. Pkt., 5c.; oz., 30c.

PERFECTION.—The largest early sort; color blood red, skin very smooth; it is one of the first to mature, solid and of good quality; ripens evenly and is very productive. Pkt., 5c.; oz., 30c.; ¼ lb., 90c.; lb., \$3.00.

ACME.—A favorite in the Chicago market, large, round, smooth, slight purple tint; early and a great bearer; one of the best. Pkt., 5c.; oz., 25c.; ¼ lb., 75c.; lb., \$2.50.

Mayflower.—One of the earliest large Tomatoes, bright red, perfectly smooth, and ripens uniformly up to the stem, very productive. Pkt., 5c.; oz., 25c.; ¼ lb., 75c.

GOLDEN QUEEN.—A new yellow tomato, very solid, large and handsome, resembling the Paragon except in color, which is a rich deep yellow, tinged with red at the blossom end when fully ripe. Its flavor is of the best, and being quite free from any acid taste, is equally desirable for slicing or preserving. It is medium in season, smooth, round and very productive; ripens evenly and does not tend to crack or rot. Undoubtedly the finest yellow tomato in cultivation. Pkt., 10c.; oz., 40c.; ¼ lb., \$1.25.

GOLDEN QUEEN.

King of the Earlys.—A very careful selection of an Extra Early Tomato, of good size, very productive, bright red in color and quite solid and ten days earlier than any other sort. We recommend it as an Extra Early Sort. Pkt., 10c.; oz., 50c.

PARAGON.—One of the largest round tomatoes in cultivation. Medium early; fine fleshed, ripens very evenly; color less purple than Acme. Pkt., 5c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

FAVORITE.—Very fine large early sort, in shape like Paragon and smoother, darker red than Perfection. Pkt., 5c.; oz., 25c.; ¼ lb., 85c.; lb., \$2.75.

VOLUNTEER.—A cross of Trophy and Canada Victor, crossed again with Perfection, combining their good qualities without retaining any of their objectionable features. It originated on Long Island and Mr. Hallock makes very strong claims for it, as follows: Large size, averaging 6 to 8 ounces, round, very smooth and perfect in form, color bright red. No core, very early, and when first fruiting ripening more abundantly than any other sort, a great advantage to market gardeners. Enormously productive, ripening well to the stem; and more free from rot or cracking than any. Pkt., 10c.; oz., 50c.

LIVINGSTON'S BEAUTY.

—This new sort has proven an introduction of the highest merit; it is as early as the Acme, very vigorous, and continues bearing throughout the season without any decrease in the size of the fruit. The tomatoes are borne in clusters of four or five, and are round, smooth and of a glossy crimson color, slightly tinged with purple. The color alone will sell it in any market. It is very solid and free from cracks

and rot; will ripen up nicely if picked green, and on account of its solidity and toughness of skin, cannot be excelled for shipping. Pkt., 10c.; oz., 30c.; ¼ lb., 80c.; lb., \$2.85.

SCOVILLE'S HYBRID.

—While visiting one of the largest Tomato Seed growers in the Union, our attention was especially called to this variety as being, in his opinion, one of the very best now before the public. It has the following points

worthy of attention: The best second early Tomato in the market, good size, fine quality, beautiful dark red color like the Trophy; ripens perfectly to the stem; very dry, with rich flavor, and next to the Canada Victor in earliness. As a canning Tomato the Scoville's Hybrid has no superior. Pkt., 5c.; oz., 30c.; ¼ lb., 90c.

Haines' No. 64.—A cross of Victor and Acme, as early as the former and smooth like the Acme. Pkt., 10c.

Optimus.—One of the best for the market and canning. Fruit medium size, oval, very smooth, of a rich crimson-scarlet color and very free from rot. Pkt., 5c.; oz., 30c.; ¼ lb., 90c.; lb., \$3.00.

White Apple.—It is the best variety for eating from the hand as a fruit and is very showy. Round, smooth and of a yellowish-white. Pkt., 5c.; oz., 30c.

New Peach and New Prelude.—See novelties.

HATHAWAY'S EXCELSIOR.—Prolific sort; apple-shaped, smooth, solid and of good quality. Pkt., 5c.; oz., 25c.; ¼ lb., 75c.

Trophy.—Good for home use; has long been a favorite. Pkt., 5c.; oz., 25c.

Large Round Yellow.—A showy sort.

Pkt., 5c.; oz., 25c.; ¼ lb., 75c.

Pear Shaped, Cherry, Red Currant, Yellow Plum.—Are distinct and showy. Each, per pkt., 5c.; oz., 25c.

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 scarcely edible; very prolific. Besides its use for preserves, it makes fine pies, and is very fine dried in sugar. Pkt., 5c.; oz., 30c.

Marengo, Ill.—I found the "Volunteer" Tomato to be early, large and good in all respects, it is earlier than the Acme. The No. 11 Lettuce was also good.

GROUND CHERRY.

E. E. Howe.

VAUGHAN'S TRANSPLANTED VEGETABLE PLANTS

Horse Radish Sets.—Per 100 75c.; 500 for \$3.00.
Chives.—Good clumps, by express only, each, 10c.; per doz., \$1.
Hop Roots.—Plant very early. Per doz., 30c.

Truck Manure.—A high grade fertilizer made especially for vegetable gardening, probably the best for the purpose now on the market. Analysis Ammonia 6 to 8 per cent; Phosphoric Acid 7 to 9 per cent; Actual Potash 6 to 8 per cent. Price, 25 lbs., \$1.25; 50 lbs., \$2.00; 100 lbs., \$3.25; 200 lbs., \$6.00; 500 lbs., \$13.00; 1,000 lbs., \$25.00; 2,000 lbs., \$50.00.

FERTILIZER

"CELERY GROWER."

A new carefully prepared manure especially for our trade among the Celery growers about Chicago and in Michigan. It is chemically suited to this crop, which demands high manuring. Price, 50 lbs., \$1.25; 100 lbs., \$2.00; 200 lbs., \$3.50.

WELL GROWN.—WE ARE THE LARGEST SHIPPERS OF THESE PLANTS.—WELL PACKED.

All of these plants are grown from seeds supplied by us from the best strains which we can procure, thus insuring genuineness of all the plants we offer. They are grown especially for our trade, by an experienced Market Gardener who has supplied us for a number of years. Our experience and knowledge of the wants of plant buyers enable us to furnish them in the right condition, and at the right time, and delivered well packed, at the Express Office on short notice. Such knowledge, which results only from long acquaintance with the business, is invaluable to every buyer, who can ill afford to take any risk of delay, or of receiving poor plants in poor condition when his soil is ready and the season demands prompt work. **Prices do not include prepayment by mail. NO ORDER SHIPPED UNDER \$1.**

	Per 50	Per 100	Per 1000
CABBAGE, Early.—READY APRIL 1ST.			
Extra Early Wakefield.....	\$ 40	\$ 75	\$ 4 50
Henderson's Early Summer.....	40	75	4 50
All Seasons.....	40	75	4 50
Vaughan's Market Gardeners'.....	40	75	4 50
Extra Early Red Erfurt.....	40	75	4 50

	Per 50	Per 100	Per 1000
CABBAGE, Late.—READY JUNE 1ST.			
Premium Flat Dutch. 5000 for \$7.50.....	20	30	1 75
Improved American Savoy.....	25	40	3 50
Red Drumhead.....	30	50	
CELERY.—Note that our prices Celery plants vary with the season, the early plants being higher in price.			
READY JUNE 1ST.			
White Plume.....	50	1 00	
Golden Self-Blanching.....	50	1 00	
Nellis' Self-Blanching.....	50	1 00	
New Rose.....	50	1 00	
Turnip Rooted, Apple Shaped.....	50	1 00	

	Per 50	Per 100	Per 1000
CELERY.—READY JUNE 20TH.			
Dwarf Golden Heart.....	35	60	3 25
Perfection Heartwell.....	35	60	3 25
White Plume.....	35	60	3 25
Turnip Rooted.....	35	60	3 25
Giant Golden Heart.....	35	60	3 25
Golden Self-Blanching.....	35	60	3 25
Nellis' Self-Blanching.....	35	60	3 25
New Rose.....	35	60	3 25

	Per 50	Per 100	Per 1000
CELERY.—READY JULY 1ST.			
Dwarf Golden Heart.....	25	50	2 50
Giant Golden Heart.....	25	50	2 50
Perfection Heartwell.....	25	50	2 50
White Plume.....	25	50	2 50
New Rose.....	25	50	2 50
Golden Self-Blanching.....	25	40	2 50
Nellis' Self-Blanching.....	25	40	2 50

5,000 lots at \$2.00, 25,000 lots at \$1.75.

	Per 50	Per 100	Per 1000
CAULIFLOWER, Early.—			
READY APRIL 1ST.			
Henderson's Snowball.....	75	1 25	6 00
Extra Early Erfurt.....	75	1 25	6 00

	Per 50	Per 100	Per 1000
CAULIFLOWER, Second Early.—			
READY MAY 1ST.			
Snowball.....	40	75	4 50
Extra Early Erfurt.....	40	75	4 50

	Per 50	Per 100	Per 1000
KOHLRABI.—READY APRIL 10TH.			
Early White Vienna.....	40	75	4 50
SWEET POTATO.—READY MAY 15TH.			
Yellow Nansemond.....	25	35	2 50

	Per 50	Per 100	Per 1000
TOMATO.—READY MAY 10TH.			
Per 1000 plants, any variety \$5.50.	Doz.	50	100
Acme.....	20	60	1 10

Acme, in flat boxes. These will bring the earliest Tomatoes, as the growth is not checked when transplanted. Per box of six extra strong plants, 30c.; doz., 50c.

	Per 50	Per 100	Per 1000
Favorite.....	20	60	1 10
Beauty.....	20	60	1 10
Mikado, or Turner's Hybrid.....	20	60	1 10

	Per 50	Per 100	Per 1000
EGG PLANT.—READY MAY 10TH.			
New York Improved Purple.....	25	85	1 50

	Per 50	Per 100	Per 1000
PEPPER.—READY MAY 10TH.			
Sweet Mountain, Extra.....	20	60	1 00
Ruby King.....	20	60	1 00
Golden Dawn.....	20	60	1 00
Cayenne.....	20	60	1 00

	Per 50	Per 100	Per 1000
LETTUCE.—READY FEBRUARY 1ST.			
Black Seeded Simpson.....	40	75	6 00

	Per 50	Per 100	Per 1000
LETTUCE.—READY MARCH 1ST.			
Black Seeded Simpson.....	50	3 75	

We are wintering over some stock in cold frames. Write for prices. If stock winters well we can quote at any time

Sharon, Wis., July 12th, '88.—Your Vegetable Plants give splendid satisfaction here. H. D. DURKEE.

OUR CHILDREN'S GARDEN.

The pleasures of gardening are acknowledged by the wisest to be the most healthful, cheerful and inspiring of all that occupy the hand and mind of man; how better then in the pleasant months of Spring and Summer can the children be entertained during their leisure hours than by a flower bed or small garden plot in the home garden, which shall bud, bloom and ripen under their own hands? We have for this purpose collected on this page a few varieties which we think especially adapted for their use. Our customers must not overlook, (when noting the few kinds named below) the fact that nearly the entire list in our book are as useful for the children as for the experienced Market Gardener or the suburban home. Two cent stamps will be accepted for any orders; do not wet them or tear them apart if in sheets.

All our flower seeds are put up in imported colored lithographed bags, on which is a good picture of the variety with full directions for sowing and cultivating the same.

VAUGHAN'S COLLECTION FOR CHILDREN'S GARDENS.

Please order by number as below.

FOR FLOWER BEDS.

COLLECTION No. 51.—10 packets FLOWER SEEDS, Annuals, 25 cents. Quick growing sorts easily cultivated.

COLLECTION No. 52.—10 packets CLIMBERS, 25 cents. Best for quick growth.

COLLECTION No. 53.—10 packets BORDER FLOWERS, 35c.;
2 Sunflowers, 2 Dwarf Nasturtiums, 2 Sweet Peas, 1 Castor Bean, 1 Marigold, 1 Mixed Zinnia, 1 Japanese Maize.

COLLECTION No. 58.—7 Collections Nos. 51 to 57 prepaid for \$2.

COLLECTION No. 59.—Summer Bulbs, 15 Varieties; Tuberose, Dahlia, Lilies, Gladiolus, Canna, etc., etc., prepaid for \$1.00.

THE VEGETABLE GARDEN.

COLLECTION No. 54.—10 packets VEGETABLE SEEDS.

One each of Radish, Lettuce, Beet, Corn, Peas, Beans, Onions.

Water Melon, Musk Melon and Squash, prepaid for 30 cents.

COLLECTION No. 55.—10 POTATOES, distinct sorts, large and

small, several colors, small tuber each for 50 cents, prepaid.

COLLECTION No. 56.—10 packets CORN, 2 Sweet, 4 Pop and 4

Field sorts all distinct and separate, 40 cents.

COLLECTION No. 57.—10 packets VEGETABLE VINES for

35 cents. Snake Cucumber, Mammoth Pumpkin, 1 Sugar

Pumpkin, 1 Jack O' Lantern Pumpkin, 2 Odd and Curious

Gourds, 1 each largest Water Melon and Musk Melon.

SPECIAL CASH PRIZES FOR CHILDREN. \$25 Cash for best COLLECTIONS OF SEEDS, \$12 to First; \$8 to Second; and \$5 to Third best. Largest number of perfect, distinct specimens to receive first prize. Reports must all be made by letter Oct. 15th, 1889, and marked "Prize Report." Winners will be required to forward collections to us if wanted. No one over 14 years of age allowed to compete.

OTHER CASH PRIZES. These as offered elsewhere on our Mammoth Pumpkin and SILVER KING ONION, are also open to children.

PHOTOGRAPH OF SOUTH PARK.

Thou hast mantled the green earth with flowers,
Linking our hearts to Nature.—Hemans.

CHICAGO, SUMMER 1887.

Hints on the Culture of Flowers from Seed:

Much annoyance and disappointment are caused yearly by giving flower seeds the wrong treatment—by keeping the soil too wet, by allowing it to dry out while the seed is germinating, by sowing too thick, or by covering too deep. We give below a few directions.

Hardy Annuals. (H. A.)—Annuals are those plants which flower, produce their seed and die within the year in which they are sown. By **HARDY** annuals is usually understood those which require no artificial heat at any period of their growth, but will, if sown in the open ground come to perfect maturity before frost, while the term **HALF-HARDY** is applied to those species which flower and often ripen their seeds in the open air, but need the artificial heat of green-house, hot bed or house in the early spring.

Sow in April or May, either in their permanent place in the open ground, or in shallow boxes two or three inches deep placed in a warm window, or in a hot-bed, the latter method being generally preferable, as plants grow hardier by being transplanted. As a rule, however, the tap-rooted annuals, such as **LARKSPURS** and **POPPIES** WILL NOT BEAR TRANSPLANTING. The selection of the soil is a very important point; a light, rich, sandy loam, not too wet or too dry, makes the best seed-bed, and is often improved by the addition of a little pulverized charcoal. Smooth the surface before sowing, cover the seed with sifted earth, and keep the soil always moist.

The absolute essential of successful flower growing is not to bury the seed too deep. The very best of seed cannot grow when choked with soil. Amateurs fail here oftener than at any other point, and their seeds and seedsmen are unjustly blamed for the failure. The depth of planting depends on the size of seed. Large seed such as **Sweet Peas** and **Morning Glory** may be covered from $\frac{3}{4}$ to $1\frac{1}{2}$ inches; such as **Zinnia**, **Mignonette** and **Candytuft**, from $\frac{1}{4}$ to $\frac{1}{2}$ inch. Fine seeds, such as **Portulacca**, **Petunia**, etc. ought not to be covered at all, or but slightly, pressing it down with a strip of board. Sun and light must be excluded from the newly sown seed—cover with paper, or a piece of moist flannel, held down by sticks or stones until the seed has germinated, and then admit gradually the air and light. When the seedlings are large enough to be handled, transplant them, observing the notes under the name of each kind in the **CATALOGUE**, which will be your guide as to how wide apart to plant, and in what position they will make the most advantageous display. Tall growing varieties should be supported by neat stakes or trellises to prevent damage from wind or rain; and last, but by no means least in importance, the weeds should be faithfully kept out and the ground frequently loosened.

Half-Hardy and Tender Annuals. (H. H. A. and T. A.)—Sow by the middle of April in shallow boxes or well drained pots, or in a hot-bed; the seeds should be thinly and uniformly scattered over the surface of the soil, pressed gently down with a strap of wood, and then covered with a slight layer of pulverized sandy soil, after which the surface may again be slightly pressed, then carefully watered with a very fine spray, or better, a rubber plant sprinkler; then place the pots on the hot-bed or in the green house near the glass and keep them shaded. If sown after the middle of May they may be planted in the open ground like **HARDY ANNUALS**. In the case of very small seeds, such as **PETUNIA**, **LOBELIA**, etc., the covering of soil should be very thin, barely hiding the seeds, and as seeds

so small are liable to be carried down into the soil unless very carefully watered, it is even advisable to moisten the surface of the soil BEFORE sowing instead of afterward. Flat seeds, such as **ZINNIA** and **COBAEA**, are best put in edgewise, being sometimes liable to rot when sown flat. When the seeds are up, gradually admit the light and air to harden them, and toward the end of May, when the danger from night frosts is past they can be transplanted to their permanent positions in the open bed or border.

Hardy Biennials and Perennials. (H. B. and H. P.)—Biennials are plants which do not flower in the first year of their growth, but flower and bear fruit in the second season and then die. Perennials are plants which continue to flower several years in succession; both live through the winter with little or no protection. These classes can be treated like **HARDY ANNUALS**, i. e., sown in the open border in spring and transplanted, or sown as soon as the seed is ripe in the fall, in which case, if the plants grow strong before the setting in of winter, they will bloom next summer. A slight protection should be given during the winter, which should be removed early in spring. This class of plants includes many of our choicest flowering varieties which abundantly repay the care given them, although they do not bloom until the second year from seed.

Half Hardy and Tender Perennials. (H. H. P. and T. P.)—Are plants which flower and produce their seed through a series of years, but which must be stored during the winter in cellar or green-house. Sow the seed between April and October in shallow, well drained boxes filled with very light sandy soil; keep shaded, moist and free from weeds. Transplant as soon as the seedlings are large enough to handle into boxes or pots, and by the end of May into the open ground. Some seeds of Perennials must lie in the ground for a year before they germinate, in which case any disturbance is injurious to the seed.

Seeds of Green-House Plants. (G. P.)—These can be sown at any season of the year, but extra care should be given them, especially to such varieties as **BEGONIAS**, **CALCEOLARIAS**, **CINERARIAS**, etc., as the seeds are very small and delicate. Sow the seeds in well drained pans, choosing for soil a fine sandy leaf-mold; press it firmly, smooth the surface and sow the seed very evenly; cover with a light sprinkling of sand or not at all, lay a pane of glass over the pan, place it in a close frame and keep shaded. Most failures are due to mistakes in watering which should be done very carefully; the seed pans should never be allowed to dry out, as one neglect will kill the seeds just starting, while on the other hand a slight excess of water will cause the seeds to rot. After the plants are up, remove the glass and prick into other pans with the same soil; great care should be taken not to pull the plants or tear the roots in transplanting; lift with a trowel or stick and shift with good roots. Keep them shaded after transplanting until the young plants are well established in the new soil. As soon as the plants touch each other, transplant again into small pots with similar soil using the same precaution of shading at first. If troubled with green flies, fumigate occasionally with tobacco.

DISCOUNTS ON PACKETS.

To induce our Customers to purchase **FLOWER SEEDS** in quantity we offer these **LIBERAL DISCOUNTS**, but wish it distinctly understood that these rates are for **SEEDS in PACKETS** only.

Customers Remitting		\$1.00 may select Flower Seeds in Pkts. amounting to \$1.20									
"	"	2.00	"	"	"	"	"	"	"	"	2.50
"	"	3.00	"	"	"	"	"	"	"	"	3.80
"	"	4.00	"	"	"	"	"	"	"	"	5.00
"	"	5.00	"	"	"	"	"	"	"	"	6.25

Above prices include postage to any point in U. S. and Canada. Special prices to dealers and clubs on larger quantities on application

GENERAL LIST — OF — SELECT FLOWER SEEDS.

This List for 1889 has been carefully revised and many new and desirable varieties added, and we believe now contains such as will be of the most real value under all conditions. Please read carefully our directions on preceding page.

ALL FLOWER SEEDS ARE SENT FREE BY MAIL.

See DISCOUNT on Packets on Previous Page. Half Packets cannot be supplied.

ORDER BY THE NUMBER GIVEN AT THE LEFT OF EACH KIND.

ABOBRA.

A rapid growing climber of the Gourd family, with handsome oval scarlet fruit, forming a striking contrast to the dark green foliage. 10 feet. H. H. P.
65 A. Viridiflora..... 10

ABRONIA.

A trailing plant, bearing clusters of Verbena like sweet-scented flowers; very effective in beds, rock work and hanging baskets. Height, 6 inches. H. H. A.
66 A. Umbellata.—Rosy lilac, with white eyes..... 5
67 —Grandiflora.—Pure rose..... 5

ABUTILON. (FLOWERING MAPLE, OR CHINESE BELL FLOWER.)

Very free blooming green house shrubs, with handsomely varied and striped bell-shaped flowers; very ornamental in flower beds. Will bloom the first season, if sown early. 2 to 6 feet. G. P.
68 A. Snowball.—Pure white..... 25
69 —Fireball.—Brilliant scarlet flowers and of compact habit..... 25
70 —Many sorts.—Extra fine mixed..... 10

ACACIA.

Elegant green house shrubs, with beautiful foliage and flowers of various colors.
71 A. Lophanta Speciosa Compacta.—15 inches..... 5
72 —Many sorts.—Fine mixed..... 5

ACANTHUS.

73 A. Latifolius.—Very ornamental, hardy perennial, of stately growth, best suited for lawn decoration..... 5
74 —Schotticus.—Very decorative variety with very large foliage..... 5

ACONITUM.

(MONK'S HOOD, WOLFSBANE.)

A showy, very free blooming plant, which thrives well under trees, shrubs, and in other shaded situations. Height, 2 feet. H. P.
75 A. Napellus.—Blue and white..... 5

ADLUMIA.

(MOUNTAIN FRINGE OR ALLEGHENY VINE.)

A hardy, very attractive climbing plant; pale green foliage. 15 ft. H. A.
76 A. Cirrhosa.—Pink and white..... 10

ADONIS.

A very showy annual, with pretty flowers and dark green foliage, good for beds and borders. Height, 15 inches. H. A.
77 A. Aestivalis (Flos Adonis).—Flowers bright crimson, peering from finely-cut dark foliage..... 5

AGERATUM.

Very effective plants for bedding, remaining in bloom throughout the whole summer, valuable cut-flower. Imperial dwarf blue and white are especially suited for ribbon bedding. Start the seed under glass, and transplant. H. H. A.
79 Ag. Mexicanum.—Blue; useful for bouquets; 18 inches..... 5
80 —Mexicanum Album.—Creamy white; useful for bouquets; 18 in..... 5
81 —Imp. Dwarf Blue.—Excellent plant for ribbon borders; 6 in..... 5
82 —Improved Dwarf White.—Like above except in color..... 5
83 —"Little Dorrit".—Splendid blue, excellent for bedding..... 10
84 —Lady Jane.—Dwarf, bright lavender-mauve flowers, extra..... 10

AGROSTEMMA.

Free blooming and attractive plants; woolly foliage. Height, 1 foot. H. P.
87 A. Cœli Rosa.—Rose of Heaven; pretty rose flower..... 5

ACROCLINEUM.

One of the most beautiful everlastings, with handsome daisy-like flowers, largely used for winter bouquets. Gather before fully open. 1 foot. H. H. A.
88 A. Album.—Pure white..... 5
89 —Roseum.—Bright rose..... 5
90 —Fl. Pleno.—New, perfectly double flowers of a bright rose..... 10

ALYSSUM (SWEET).

A general favorite, with delicate white flowers of exquisite fragrance, very free blooming, suitable for beds, borders and rockwork; very useful cut-flowers for the winter. H. A.
91 A. Maritimum.—White, very sweet..... 5
92 —Benthami Compactum.—Of dwarf, robust growth; 6 inches..... 5

AMMOBIUM.

A favorite everlasting, with white flowers; cut before fully open. H. A.
93 A. Alatum Grandiflorum.—A decided improvement on the old Alatum, flowers being much larger. 2½ feet..... 5

ALONSOA (MASK FLOWER).

Showy plants, extraordinarily well adapted to bedding and in-door culture; does well in any rich garden soil. Height, 18 inches. H. H. A.
94 A. Grandiflora.—Bright scarlet, large flowering..... 5
95 —Warscewiczii.—Brilliant crimson..... 5

AMPELOPSIS (JAPANESE IVY).

96 A. Veitchii.—A species of woodbine from Japan, with very pretty olive green foliage, which turns to bright scarlet, crimson and orange in the fall. It does not require fastening, as it clings to the smoothest walls. It is perfectly hardy, and is fast becoming a general favorite. H. P..... 10
For prices on plants see "Hardy Climbers."

AMARANTHUS.

Ornamental foliage plants of extremely handsome appearance, giving the borders a sub-tropical effect. Should not be grown in too rich a soil, else the leaves will not develop their brilliancy of colors. H. H. A.
97 A. Atropurpureus.—Deep blood red foliage, with drooping flower spikes; 2 feet..... 5
98 —Abyssinicus.—Splendid as solitary plants on lawns..... 5
99 —Caudatus.—(Love Lies Bleeding.) Exceedingly pretty; 2 feet..... 5
100 —Henderi.—Leaves intense rosy carmine, varying with orange buff, golden yellow and olive green, very choice; 3 feet..... 10
101 —Nobilis Pyramidalis.—Blood red, compact; 3 feet..... 5
102 —Tricolor.—(Joseph's Coat.) Scarlet, green and yellow; 2½ feet..... 5
103 —Salicifolius.—(Fountain Plant.) Of pyramidal, drooping habit, branching close to the ground; leaves green with orange, bronze and crimson shading; 4 feet..... 5
104 —Fine Mixture of many varieties..... 5

ANAGALLIS (PIMPERNEL).

One of the brightest of wild flowers, very free flowering and admirably adapted to edging, baskets, etc. Succeed best in light, rich soil in sunny places. H. H. A.
105 A. Grandiflora.—6 inches..... 5

ABRONIA.

ADLUMIA.

AGERATUM, IMPERIAL DWARF.

A. ATROPURPUREUS.

A. BENTHAMII COMPACTUM.

VAUGHAN'S SUPERB ASTERS

DOUBLE CHINA ASTERS

Lawrenceburg, Ind., Nov. 3, '88.
Your Aster novelties gave the best of satisfaction, and you may count me among your next season's patrons. Faxon's Royal Mixture is the finest I have ever tried. Of the White Mignon every seed came up and were beautiful.

MRS. S. C. FRANKS.

This is not only one of the most popular, but also one of the most effective garden favorites, and there is no flower which combines so much beauty and variety of habit and shape with such brilliancy and richness of color as this. It has no equal among the annuals. It is splendid for bedding, bordering or pot plants. Give it rich soil and plenty of water for best results. H. H. A.

THE SEED WE OFFER HAS BEEN SAVED FROM THE VERY BEST DOUBLE FLOWERS ONLY.

WE BEG TO CALL SPECIAL ATTENTION TO THE MANY NEW AND VERY FINE COLORS WE HAVE ADDED TO OUR LIST.

GIANT EMPEROR.

Flowers of immense size, and pyramidal form. It bears a few flowers on a robust stem, 2 ft.

110 Many Colors, Mixed..... 10

NEW CROWN or COCARDEAU.

Central petals of purest white, making a striking contrast to the large, brilliantly colored outer petals; very effective, 2 ft.

111 Many Colors, Mixed..... 10

TRUFFAUT'S PÆONY PERFECTION.

Large and remarkably fine flowers with long beautifully incurved petals, resembling those of the Pæony. One of the finest asters. 2 feet.

112 Pure White. 115 Dark Blue.

113 Brilliant Rose. 116 Dark Crimson.

114 Light Blue. 117 Crimson Ball.

118 White with blackblue.

119 Gravelotte (deep blood red).

120 Pink and White.

121 Light Blue and White.

122 Dark Crimson and White.

Each of the above, per pkt. 10c., 3 for 25c.

123 Brilliant scarlet with white, effective..... 15

124 La Superbe, skyblue tipped white, exceedingly pretty..... 15

125 Mixed Colors, Extra Choice..... 10

126 Collection of 12 distinct colors..... 75

127 " " 6 " " 40

VICTORIA.

UNDOUBTEDLY THE MOST HANDSOME ASTER IN CULTIVATION, of which we have an excellent strain.

Flowers very large and perfectly double, of globular shape, fine pyramidal form. 1 3/4 feet.

128 Pure White. 131 Crimson.

129 Rose. 132 Light Blue.

130 Dark Blue. 133 Appleblossom.

134 White tinted pink.

135 White turning to azureblue.

136 Light blue and white.

137 Bright rose tinged white.

138 Crimson and white.

Each of the above, per pkt. 10c., 3 for 25c.

139 Indigo blue on white ground, most charming color..... 15

140 Many Colors.—Finest mixed..... 10

141 Collection of 12 distinct colors..... 1 00

142 " " 6 " " 50

VICTORIA NEEDLE.

In habit of growth similar to Victoria, flowers very double; petals consist of tubes or quills; a very attractive sort. 1 1/4 feet.

143 Four Separate Colors—40c. Each..... 15

144 Many Colors, Choice Mixed..... 10

PURE WHITE MIGNON.

145 This new variety greatly resembles the Victoria Aster in growth and habit, but it excels in free bloom. The flowers are of purest white, globular and beautifully imbricated.... 10

GERMAN QUILLED.

146 Many Colors, Choice Mixed..... 5

NEW COMET ASTER.

147 A handsome, new and very distinct Aster of last year's introduction, much resembling the Japanese Chrysanthemum in shape of flowers; the petals, which are long and curled, are curved from the center of the flowers to the outer petals so as to form a dense semi-globe, and are of a lovely delicate pink color bordered with white..... 25

NEW PEARL, TRIUMPH AND FAXON'S ROYAL ASTERS.—See novelties.

NEW PURE WHITE LILIPUT ASTER.

148 A charming variety of most free-blooming habit. The flowers are small, but the abundance with which they are produced renders them extremely valuable for cut flowers and for pot culture..... 10

DWARF PÆONY PERFECTION.

A beautiful semi-dwarf Aster, in habit of growth and shape of flowers like the Truffaut's, but only 1 foot high.

149 White. 152 Pink and white.

150 Pink. 153 Light Blue.

151 Crimson and white. 154 " and white.

155 Shining dark scarlet, very rich and brilliant.

Each of the above per pkt. 10c.

156 Choice Mixed Colors..... 10

157 Collection of 6 distinct colors..... 40

CHRYSANTHEMUM-FLOWERED DWARF.

Of very compact growth; flowers from three to four inches in diameter and very abundant; later than other varieties, therefore valuable for succession. 1 ft.

158 White. 161 Dark Blue.

159 Brilliant Rose. 162 Light Blue.

160 Dark Crimson. 163 Peachblossom.

164 White Changing to Rose.

165 Fiery Copper red with white.

166 White turning to azureblue.

167 Brick rose and white.

168 Light blue and white.

169 Carmine and white.

Each of the above, per pkt. 10c.; 6 for 50c.

170 Many Colors, Choice Mixed..... 10

171 Collection of 12 separate colors..... 75

172 " " 6 " " 40

173 New "La Brillante" Aster. A new and most distinct color of the Dwarf Chrysanthemum race. The flowers which are produced in great abundance are of the most brilliant dark scarlet, exceedingly effective for groups 10

IMPROVED DWARF PYRAMIDAL

BOUQUET.

A magnificent dwarf variety, about 10 inches high. When well grown, a single plant forms a complete bouquet of pyramidal shape, and covers itself with blossoms, entirely hiding the foliage. Fine for edging and small beds.

174 White. 177 Peach blossom.

175 Crimson. 178 Light Blue.

176 Dark Pink. 179 Dark Blue.

180 Dark blood red and white.

181 Dark Blue and white.

182 White and carmine.

Each of the above, per pkt. 10c.; 6 for 50c.

184 Fine Mixed, many colors and shades..... 5

185 Collection of 12 distinct colors..... 60

186 " " 6 " " 35

DWARF VICTORIA.

In habit of growth like the Victoria, but only about 12 inches in height. Flowers are very large, of most exquisite shape and of brilliant color.

187 White. 189 Brilliant crimson.

188 Pink. 190 Indigo Blue.

191 White and dark blue.

192 White and carmine.

Each of the above, per pkt. 15c.; 3 for 35c.

193 Many Colors mixed..... 10

TALL ASTERS.

194 In great variety, and many different classes mixed. 1/2 ounce 25 cents..... 5

DWARF ASTERS.

195 In great variety, and many different classes mixed. 1/2 ounce 25 cents..... 5

NEW COMET ASTER.

ANTIRRHINUM (SNAPDRAGON).

An old garden favorite, with dark glossy leaves, and oddly shaped flowers with pretty spotted throats; one of our most showy and useful border plants. A perennial that blossoms the first summer.

- 201 A. Majus, Tall Sorts.—6 separate colors 25c., each... 5
202 Many colors mixed..... 5
203 Tom Thumb.—Entirely distinct from above, grow about 8 in. high, and are exceedingly attractive. Six distinct colors, White, Yellow, Crimson, Scarlet and Striped Orange, 25c. each, 5
204 Tom Thumb.—All colors, mixed. 5

ANTIRRHINUM.—TOM THUMB.

AQUILEGIA (COLUMBINE).

A very showy class with curiously shaped blossoms, in great variety of colors; ranks among the finest early Spring flowering plants. H. P.

- 205 A. Double Varieties.—In finest mixture..... 10
206 — Single Varieties.—All colors mixed..... 5
207 — Chrysantha.—Golden yellow very flowers; pretty for bouquets..... 10

AQUILEGIA.

ARISTOLOCHIA.

A rapid growing hardy climber, having curious, horn-shaped flowers and large heart-shaped leaves. It attains a height of 30 to 40 feet. H. H. P.

- 213 A. Siphon or Dutchman's Pipe..... 10

ASPERULA.

A pretty little annual of dwarf habit, growing about 10 inches high, bearing numerous clusters of small, sweet-scented, light blue flowers. H. A.

- 215 A. Azurea Setosa..... 5
219 — Odorata, Waldmeister.—Flowers white, scented, thrives best in the shade. Used for Maitrank, a favorite German beverage..... 10

AURICULA.

A well known favorite from Switzerland, with beautifully marked and colored flowers. Seed takes sometimes from three to five months to germinate. Height 6 inches. H. H. P.

- 220 A.—Mixture from one of the finest collections..... 25

BARTONIA AUREA.

anda. 30 feet. P. H.

- 223 B. Radicans..... 10

BALLOON VINE (LOVE IN A PUFF).

A pretty, rapid growing climber, very ornamental; thrives best in a light soil in a warm situation. 5 feet.

- 221 B. Vine.—Flowers white..... 5

BARTONIA.

A pretty free-flowering plant with downy, thistle-like foliage. Height 2½ feet. H. A.

- 222 B. Aurea.—Flowers a beautiful golden yellow..... 5

BIGNONIA (TRUMPET VINE).

A much admired hardy, deciduous climber, perhaps the most showy of all the flowering climbers. The brilliant scarlet, trumpet shaped flowers almost cover the vine. One of the best climbers for covering a wall, side of house or veranda.

BEGONIA.

The Tuberous Rooted Begonias are gaining rapidly in favor, owing to their general utility and beauty. The plants are compact in habit and strong in growth; the flowers of the single varieties are very large, sometimes measuring from 5 to 6 inches from tip to tip, and are of all shades of color, ranging from the deepest crimson, scarlet and pink, and from golden yellow to creamy white. They are excellent bedding plants, and do equally well in the house. They require a sandy leaf mold and plenty of water during growth and the blooming period. Take up the bulbs after the frost has killed the foliage and keep them in a dry, warm place, in dry soil.

BEGONIA.—SINGLE TUBEROUS ROOTED.

- 224 B. Single.—A magnificent strain in splendid mixture, 25
225 — Double.—Choicest mixture..... 25
For Bulbs see list of Plants and Bulbs.
226 — Rex Hybrids.—Ornamental leaved varieties saved from choicest sorts..... 25

BOCCONIA.

- 227 B. Japonica.—The stately habit of this plant renders it most effective for lawn decoration. The foliage is large and finely cut, and for situations where single specimen plants are desired it can hardly be surpassed. Also well adapted for pot culture. H. P. 5 to 8 feet..... 10

REX BEGONIA.

BATCHELOR'S BUTTON.

(SEE CENTAUREA CYANUS.)

BALSAM APPLE (MOMORDICA).

Very curious trailing plants, with ornamental foliage and golden yellow fruit, which opens when ripe, showing the seed and its carmine interior. 10 feet. H. H. A.

- 228 M. Balsamina.—Balsam Apple..... 5
229 — Charantia.—Balsam Pear..... 5

BALSAM APPLE.

BRACHYCOME (SWAN RIVER DAISY).

A dwarf, free bloomer, excellent for baskets and edgings; blue flowers. H. H. A.

- 230 B. Iberidifolia. 1 foot..... 5

BROWALLIA (AMETHYST).

Valuable bedding plant, flowers produced in great abundance and very showy. Does well in greenhouse and for house culture when sown in August. Height, 1½ feet. H. H. A.

- 231 B. Elata.—Blue..... 5 | 233 B. Roezli.—White and pale blue. 10
232 — Alba.—White..... 5 | 234 Elata.—Fine mixed..... 5

BELLIS PERENNIS (DOUBLE DAISY).

DOUBLE DAISY, LONGFELLOW.

- Very pretty double red and white flowers; desirable for borders. Thrive well in shady places. 4 in. H. H. P.
236 B. Best Double mixed..... 10
237 — Flore Albo. Double white; pretty..... 10
238 — Longfellow This variety produces dark rose flowers, unusually large and double, having very long and stiff flower spikes; valuable for bouquet. 15

Duluth, Minn., June, 15th, 88. All the seeds I received of you this year are first class and we are well satisfied with them N. J. THILL.

5

43

JAPANESE AND CHINESE CHRYSANTHEMUMS.

CALLIRHOE.

Very pretty trailing plants suitable for bedding.

- 296 *C. Pedata*.—Flowers violet purple, white eye..... 5

CANARY BIRD FLOWER.

One of the most charming climbers, bearing an abundance of bright yellow fringed flowers. 10 feet. H. H. P.

- 297 *T. Peregrinum* (Canariense)..... 10

CANDYTUFT (IBERIS).

Very useful for beds, ribbons, etc., also for pots and for cut flowers for bouquets. A bed of Candytuft in colors makes a splendid display. H. A.

- 298 *I. White Rocket*.—(Coronaria). 1 ft. oz. 25c..... 5
 299 ——— *Dwarf*.—(Tom Thumb) for edgings and ribbon beds. 6 in..... 5
 300 ——— *Umbellata Lilacina*.—Purple lilac. 1 ft..... 5
 301 ——— *Crimson*.—Beautiful color. 1 foot..... 5
 302 ——— *New Carmine*.—Dwarf plants, with vivid carmine flowers..... 5
 ——— *New Empress*.—See novelties.
 303 ——— *Mixed*.—(Annual varieties)..... 5
 304 ——— *Sempervirens*.—Perennial..... 10

CANNA (INDIAN SHOT).

A showy foliage plant, valued alike for its large, handsome leaves and showy flower spikes of varied shades of red and yellow. If the seed, which should be soaked for twelve hours in warm water, is sown early in a hot-bed and transplanted into not too rich soil, the plants will bloom the first season. 5 to 7 ft. H. H. P. For roots see Bulbs and Plants.

- 305 *C. Fine Mixed*..... 1/2 oz. 25c 5
 306 ——— *Dark Leaved Varieties*.—Mixed..... 5
 307 ——— *Crozy's New Varieties*.—This new and entirely distinct class of Cannas is of dwarf, compact habit, producing flowers similar to those of the Gladiolus but excelling them in brilliancy, markings and variety of colors, embracing all shades from light lemon to the deepest orange and red to the deepest magenta. They are equally valuable for groups, solitary plants and for house decoration. It is impossible to say enough in praise of the exceeding beauty of these new Cannas. They will bloom the first year from seed..... 10

CARNATION (DIANTHUS CARIOPHYLLUS FL. PL.).

This lovely flower, known to everybody, succeeds in any light soil, and will give better flowers than slips taken from old plants. The seed we offer is saved from the finest collection in Europe. H. H. P.

- 308 *C.*—Fine double mixed..... 10
 309 ——— *Extra Choice Mixed*.—Saved from a rich collection of named flowers, which will produce splendid varieties of selfs, bizarres and flakes 25
 310 ——— *Grenadin*.—Of dwarf, compact growth, flowers deep salmon red. Blooms some three weeks earlier than any other variety..... 10
 311 ——— *Vienna Dwarf*.—The best garden sort, which produces a large percentage of double flowers..... 10
 312 ——— *New Everblooming*.—See novelties.

CANNA CROZY'S HYBRIDS.

CINERARIA CANDIDISSIMA.

PARIS DAISY.

- 326 ——— *Segetum Grandiflorum*.—Flowers sulphur yellow, very large, often measuring 2 to 2½ inches in diameter. A valuable cut flower. 1 ft. 5
 327 ——— *Lord Beaconsfield*.—Crimson maroon edged, and striped with a golden rim, surrounding a rich brown eye..... 10
 328 ——— *The Sultan*.—Rich crimson maroon, with golden rim..... 10
 329 ——— *Golden Feather*.—New: foliage of a striking golden yellow, flowers white, with a crimson ring near the centre..... 10

CHINESE AND JAPANESE CHRYSANTHEMUMS.

This "QUEEN OF AUTUMN" has created a great stir in Floral circles the last few years, and no flower is now more prominently before the public than this. If sown early in the spring (in the house), transplanted several times, and otherwise properly treated, they will produce strong plants that will flower freely in the Autumn. H. H. P.

We have secured some very fine seed from the choicest varieties in cultivation, embracing all the best Incurved, Pomponé, Japanese and Chinese varieties.

- 330 Chinese and Japanese Varieties, mixed..... 25

Patriot, Ind., Nov. 3, '88.—After having given your flower seeds careful attention, I find them to be all you represented them to be.
 Edna Winn.

CHRYSANTHEMUM SULPHUREUM PL.

CENTAUREA (DUSTY MILLER).

Valuable bedding plants, with silvery foliage, deeply cut, forming a striking contrast when grouped with other plants. H. H. P. Height, 1 foot.

- 313 *C. Candidissima*.—Leaves silvery white, finely cut, the best for carpet bedding, vases, etc..... 25
 314 ——— *Gymnocarpa*.—Very graceful, silvery gray foliage..... 10
 315 ——— *Clementei*.—Vigorous grower, with elegant and deeply cut silvery foliage..... 10
 316 ——— *Cyanus* (BACHELOR'S BUTTON).—Blue "Emperor Flower"..... 5
 317 ——— *Bachelor's Button*, many colors mixed..... 5

CHRYSANTHEMUM.

Owing to the great usefulness of the annual Chrysanthemums the demand for the same has, especially among the florists, more than tripled in the last few years; in fact, there is no annual which furnishes so many cut flowers as these. They bloom until Fall, and make lovely plants for beds, borders, etc. H. A.

- 318 *C. Coronarium Album Pl.*—Double white. 2 feet..... 5
 319 ——— *Double yellow*. 2 feet..... 5
 320 ——— *Inodorum Plenissimum*.—Double white flowers in great abundance; excellent for bouquets. 1½ ft. 10
 321 ——— *Burridgeanum*.—Crimson, white centre. 1 ft..... 5
 322 ——— *Carinatum Eclipse*.—An excellent showy new variety. Its large single flowers are 2 to 2½ inches in diameter, and exhibit a striking contrast in markings; they are pure golden-yellow with a bright purplish-scarlet ring on the ray florets, the disk being dark brown 10
 323 ——— *Sulphureum Fl. Pl.*—A charming new variety, with double flowers of a delicate lemon or sulphur; valuable for bouquets..... 10
 324 ——— *Frutescens Grandiflorum*.—(Paris Daisy or Marguerite). Produces an abundance of large white star-shaped flowers, succeeds in any garden soil. 2½ ft. 10
 325 ——— *Frutescens, Etoile d'or*.—Golden yellow..... 10
 326 ——— *Segetum Grandiflorum*.—Flowers sulphur yellow, very large, often measuring 2 to 2½ inches in diameter. A valuable cut flower. 1 ft. 5
 327 ——— *Lord Beaconsfield*.—Crimson maroon edged, and striped with a golden rim, surrounding a rich brown eye..... 10
 328 ——— *The Sultan*.—Rich crimson maroon, with golden rim..... 10
 329 ——— *Golden Feather*.—New: foliage of a striking golden yellow, flowers white, with a crimson ring near the centre..... 10

MORNING GLORY.

CYPRESS VINE.

COREIA SCANDENS.

CYCLAMEN.

CELOSIA (COXCOMB).

A highly ornamental annual with feathery flowers, valuable for bedding and house culture. 1 to 3 feet. H. H. A.

- 331 — **President Thiers.**—(Glasgow Prize).—This is the most dwarf of all Coxcombs and bears largest crimson combs. It has been grown in Lincoln Park between or along side of rows of Golden Feverfew and Centaurea Candidissima and when so planted made one of the most brilliant strips of border bedding ever seen, its heavy compact heads making a solid mass of crimson contrasting against the foliage of other plants. 10
- 332 — **New Giant Empress.**—Very large bright purple combs and dark foliage; beautiful variety..... 10
- 333 — **New Fire Feathered.**—The feathered varieties of the Celosia rank amongst the most decorative annuals. The feathery flowerheads of this grand variety, which are produced on numerous branches, are of an intense orange-scarlet or fire color of great beauty. They are equally effective as solitary plants and if planted in groups..... 10
- 334 — **New Gold Feathered.**—The feathered flowerheads are of a golden-orange color, a grand plant..... 10
- 335 — **Reid's Perfection.**—Beautiful variety with feathered plumes of the richest magenta-red..... 10
- One packet each of the above 5 sorts for 35c.
- 336 — **Tall Sorts.**—Splendid mixture..... 5
- 337 — **Dwarf Sorts.**—In great variety..... 5

CINERARIA.

A favorite greenhouse plant, with large handsome flowers, in richly diversified colors; one of our best early spring flowering plants. (G. P.)

- 338 **C. Hybrida Grandiflora.**—Our strain is unsurpassed..... 25
- 339 — **Fl. Pleno, Double.**—In extra fine mixture..... 50
- The following Cinerarias are half hardy perennials, with silvery foliage, used chiefly for beds and borders.
- 340 **C. Candidissima.**—Silver foliage, pretty..... 10
- 341 — **Maritima.**—White, deeply cut..... 5

CLEMATIS.

Well known, rapid growing, free-blooming climber.

- 350 **C. Jackmanni.**—A mixture of choice hybrids, the finest of all..... 25
- 351 — **Coccinea Grandiflora.**—Beautiful large scarlet bell-shaped flowers

CLIANTHUS (GLORY PEA OF AUSTRALIA).

One of the most gorgeous plants in cultivation, with clusters of pea-shaped flowers, each flower being marked with intense black spots in the centre. H. H. shrub.

- 352 **C. Dampieri.**—Flowers of a vivid scarlet. 3 ft. 25

COBÆA.

A rapid growing climber, sometimes attaining the length of thirty feet in a season. To prevent it from rotting, place the seeds edgewise and cover slightly with light soil.

- 353 **C. Scandens.**—Purplish lilac..... 10
- 354 — **Alba.**—White..... 15

COLEUS.

Highly ornamental plants in an endless variety of colors and shadings, indispensable for ribbon and carpet bedding, or as single specimens. Height, 1 to 2 ft.

- 355 **C. Finest Hybrids.**—In splendid mixture..... 25

COLLIINSIA.

- 356 **C. Bicolor.**—Purple and white..... 5

COLUMBINE (SEE AQUILEGIA).

CONVOLVULUS MAJOR (MORNING GLORY).

A well-known climber, free flowering, succeeds in almost any situation. Height, 15 feet. H. A.

357 C. White. 5	359 C. Crimson. 5
358 — Blue. 5	360 — Striped. 5
361 — Many Varieties. —Mixed, per ounce, 20 cents..... 5	
362 — Collection of six distinct colors. 25	

CONVOLVULUS MINOR (DWARF MORNING GLORY).

Excellent annuals for beds, masses, window boxes, etc., remarkably rich in color, and very free-blooming. 1 foot. H. A.

- 365 **C. Kermesinus Violaceus.**—The flowers have a bright yellow eye, encircled with snowy white, margined with rich crimson violet..... 10
- 366 — **Tricolor.**—Violet, purple and white..... 5
- 367 — **Tricolor Roseus.**—A charming variety. The centre of the rose-colored flowers is surrounded with purplish violet, and changes toward the throat into golden yellow..... 10
- 368 — **Minor.**—Many varieties mixed, per oz., 25c..... 5
- 369 — **Mauritanicus.**—Fine for hanging baskets, beautiful blue flowers..... 5

CORAL TREE (ERYTHRINA).

- 370 A half-hardy shrub, beautiful spikes of scarlet pea-shaped blossoms..... 15

COWSLIP.

A very free-blooming early spring flower, useful for borders. H. P.

- 371 Mixture of fine varieties. 9 in..... 5

COXCOMB (SEE CELOSIA).

DOUBLE DAISY (SEE BELLIS).

CYCLAMEN.

Valuable as a winter and spring bloomer, for pot culture in parlor or conservatory. If sown early in spring under glass, with right treatment, will make flowering bulbs in one year.

- 375 **C. Large Flowering.**—Fine mixed..... 25
- 376 — **Persicum Grandiflorum Giganteum.**—A very distinct and effective novelty; is of very free flowering, sturdy habit, and produces flowers of immense size and of many shades of colors..... 25
- 377 — **Sanguineum.**—The flowers of this new variety are of the deepest and richest blood red imaginable and are the largest of any sort yet introduced. The seed we offer is very fine and will give the most satisfactory results..... 35

CYCLANTHERA.

- 385 **C. Explodens.**—A handsome climber, growing ten feet high, with oval fruits which explode loudly when ripe. H. H. A..... 10

CYPRESS VINE (IPOMÆA QUAMOCUIT).

Very handsome climber; foliage light and graceful, flowers brilliant; excellent for trellises, walls, etc.

- 386 **C. White, Pink, and Crimson.** Each..... 5
- 389 — **Many Colors.**—Mixed..... 5

CUPHEA (CIGAR PLANT).

Bears curious blossoms somewhat resembling a lighted cigar. Pretty for bedding purposes and for house culture; very ornamental. 1 ft. H. H. A.

- 390 **C. Purpurea.**—Mixed..... 5
- 391 — **Platycentra.**—Bright scarlet..... 10
- 392 — **Roezli.**—Of pyramidal habit, flowers vermilion and orange..... 10

DAHLIA.

When sown early, Dahlias will bloom the first year.

The single varieties have become very popular within the last few years, and deservedly so, for in brilliancy color and duration of flower they have hardly any equal. They are extensively used for cutting. 3 to 6 ft. H. H. P.

- 393 **D. Coccinea Hybrida.**—An extra fine mixture from named sorts of single hybrids..... 10
- 394 — **Large Flowering Double.**—A mixture from prize flowers..... 15

- 395 — **Zimpani.**—A very little known variety from Mexico, which owing to its merits deserves a foremost place in the flower garden. The plants grow about 2 feet high and very bushy, and produce an abundance of the deepest crimson maroon flowers of a velvety texture measuring 3 inches across. They are easily raised from seed..... 10

- 396 — **Striped.**—See novelties.

See also "Roots and Plants."

SINGLE DAHLIAS.

DIANTHUS (PINK).

This is one of the most desirable families of plants. Its species are very numerous, embracing some of the most popular flowers in cultivation, indispensable for bedding, bordering, etc. All are of fine shape, and many are deliciously fragrant.

DIANTHUS—EASTERN QUEEN.

DIANTHUS CHINENSIS FL. PL.

DIANTHUS DIADEMATUS FL. PL.

DIANTHUS LACINIATUS.

- 400 *D. Chinensis* (Double Chinese Pink)—No garden should be without it. Choice mixed 5
401 — *Albus Plenus*.—Double white, 1 foot 5
402 — *Nanus Roseus*.—An exceedingly pretty new variety, with brilliant double pink flowers. 10
403 — *Imperialis*.—(Double Imperial Pink) mixed colors. 5
404 — *Atrosanguineus Pl.*—Dble crimson, 1 foot. 5
405 — *Heddewigii*.—Very fine large flowered, single Japan Pink. Mixed. 5
406 — *HEDDEWIGII FL. PL.*—Double Japan Pink. Splendid mixture. 10
407 — *Double Dark Blood-red*.—A most brilliant and effective color for beds. 10
408 — *DIADEMATUS FL. PL.*—A decided improvement on the above; the growth is sturdy, the flowers large, the colors ranging from lilac and crimson to the deepest purple; the edges of the petals are finely fringed and have a clearly defined white margin 10
409 — *Laciniatus*.—Very large, deeply fringed flowers in rich colors. A mixture of many colors. 5
410 — *Fl. Pl.*—Double, deeply fringed flowers. Extra choice mixed. 10
411 — *"Eastern Queen"*.—Beautifully marbled, the broad bands of reddish lake upon the paler surface of petals are very striking and pretty. One of the most valuable of late introductions. 10
412 — *"CRIMSON BELLE"*.—Is of a rich vivid crimson color; flowers are finely fringed. 10
413 — *Plumarius*.—(Pheasant's Eye Pink.) Handsome single fringed flowers, white with dark centers. 5
414 — *Plumarius fl. pleno*.—Double large flowering, with fringed edges of various colors, mixed hardly. 15
415 — *Mourning Cloak*.—The most striking and beautiful of all the Pinks. The large double, almost black flowers, have a clear fringed edge of white which is unusually distinct and charming. 10
416 — *Nanus Albus Plenus*.—Dwarf double white. 10
417 — *Nanus Flore Pleno*.—Mixture of dwarf sorts. 10
418 — A mixture of all the above mentioned annual Pinks. Per pkt. 5c; 6 for 25c.

DATURA (TRUMPET FLOWER).

Hardy annuals, with large showy trumpet-shaped flowers that continue blooming until frost. 3 feet.

- 418 *D. Fastuosa Huberiana*, Mixed.—Very large double flowers. 10

DOUBLE LARKSPUR.

DELPHINIUM (LARKSPUR).

A.—PERENNIAL VARIETIES.

- 419 *D. Formosum*.—Bright blue, white centre, fine for bouquets and garden decoration. 3 feet. 5
420 — *Nudicaule*.—Flowers bright orange red, borne on stems 12 to 18 inches high. Exceedingly pretty. 10

B.—ANNUAL VARIETIES.

Very showy plants with pretty flower-spikes; free bloomers; should be sown in fall or in early spring.

- 421 — *Double Dwarf Rocket*.—Finest mixed 1½ feet. 5
422 — *Tall Rocket*.—Mixed. 2½ feet. 5
423 — *Bismarck*.—Fine mixed colors. 2½ feet. 5
424 — *Emperor*.—Profuse bloomer, symmetrical habit, 1½ ft., mixed colors 5

DIGITALIS (FOX GLOVE).

A stately plant, flowers thimble-shaped and spotted, borne in dense spikes. Height, 3 feet. H. P.

- 425 *D.*—Fine mixed. 5

Humboldt Park, Ill., Aug. 27, '88.—My garden is a good advertisement of your seed, for I have the best garden here. A lady came to look at it the other day saying everybody was speaking of it.
Richard Blackburn.

ESCHSCHOLTZIA (CALIFORNIA POPPY).

An exceedingly showy class of plants, bearing a profusion of rich yellow flowers. Sow the seed where the plants are wanted to bloom, as they do not stand transplanting; thin to 6 inches apart. H. A.

- 428 *E. Mandarin*.—The inner side of the petals is of a rich crimson, while the exterior is orange crimson. It is a beautiful variety and deserves to be widely grown. 10

- 429 — *Californica Alba Pl.*—Produces a large percentage of double white flowers of great beauty. 10

- 430 — *"Rose Cardinal"*.—Very pretty, deep carmine flowers, which remain in bloom for a long time. 5

- 431 — *Many varieties*.—Mixed. 5

- 432 — *Many varieties*.—Mixed. 5

- 433 — *Many varieties*.—Mixed. 5

- 434 — *Many varieties*.—Mixed. 5

- 435 — *Many varieties*.—Mixed. 5

- 436 — *Many varieties*.—Mixed. 5

- 437 — *Many varieties*.—Mixed. 5

- 438 — *Many varieties*.—Mixed. 5

- 439 — *Many varieties*.—Mixed. 5

- 440 — *Many varieties*.—Mixed. 5

- 441 — *Many varieties*.—Mixed. 5

- 442 — *Many varieties*.—Mixed. 5

- 443 — *Many varieties*.—Mixed. 5

ESCHSCHOLTZIA FLORE PLENO.

- 453 *E. Viscida*.—Very pretty, attractive flowers. 5

EVERLASTING or ETERNAL FLOWERS

(SEE ACROCLINEUM AMMOBIUM, GOMPHRENA, HELICHRYSUM, XERANTHEMUM).

GOMPHRENA.

GAILLARDIA GRANDIFLORA SUPERBA.

EDELWEISS.

FORGET-ME-NOT, VICTORIA.

DOLICHOS (HYACINTH BEAN).

- A fine climber with edible seeds and pods. Height, 10 feet. T. A.
436 D. Lablab.—White, purple or lilac flowers mixed..... 5

DUTCHMAN'S PIPE (SEE ARISTOLOCHIA).

EDELWEISS (GNAPHALIUM LEONTOPODIUM).

- 437 The true and famous Edelweiss of the Alps. The flowers are of downy texture, pure silver-white and star shaped. Succeeds in almost any not too rich soil, with full exposure to the sun..... 25

FEVERFEW (SEE PYRETHRUM).

FOX GLOVE (SEE DIGITALIS).

FORGET-ME-NOT (MYOSOTIS).

Pretty little favorites with lovely clusters of fine delicate flowers. They succeed best in a damp, shaded situation, but will thrive well in any garden-soil. Height, 6 in. H. P.

- 440 M. Alpestris.—Blue..... 5
441 — — Alba.—White..... 5
442 — — Robusta Grandiflora "Eliza Fanrobert."—New. Of pyramidal growth: flowers very large and of a most exquisite sky-blue, with clearly defined yellow eye..... 10
443 — — Victoria.—The flowers are large and of a bright azure blue with yellow centres, borne in dense umbels. The plants grow about five to six inches high, forming neat globular bushes from sixteen to eighteen inches in circumference, which are completely covered with flowers and remain in bloom for a long time. These important features render it a most valuable variety for cut-flowers and pot-culture, as well as for carpet and ribbon bedding..... 25

GAILLARDIA (BLANKET FLOWER).

One of the most brilliant and dazzling of our garden flowers. Most suitable for bedding, producing large flowers in great abundance throughout the entire summer. 1½ feet. H. A.

- 444 G. Fine Mixed..... 5
445 — — Picta Lorenziana.—This new double variety produces large globular heads of various colors in great abundance throughout the entire summer. The seed offered is mixed, containing sulphur and golden yellow, claret, red and purple. Most valuable for cutting and bedding..... 10
446 — — Grandiflora Superba.—This new species of Gaillardia is very free-flowering, the flowers are of extraordinary size and remarkable beauty, often measuring 5 inches in diameter; the colors are very vivid, principally red with yellow and orange border. The plants are very effective and are extremely desirable for bedding, massing and especially for cut-flowers..... 10

GERANIUM (PELARGONIUM).

Well known favorites, used extensively for bedding in masses, ribbons, etc. When sown early Geraniums will bloom the first year from seed.

- 450 G. Zonale.—A mixture of the finest varieties..... 25
451 — — A very good mixture..... 10
452 — — Apple Scented.—True, very fragrant foliage: a great favorite..... 25
453 — — Double.—A choice mixture, which will produce a large percentage of double flowers..... 25
454 — — Lady Washington.—Well known pot plant..... 25

GILIA.

Free blooming dwarf plants, valuable for mixed beds, rock work, etc. H. A.
455 G. Mixed colors..... 5

GLOBE AMARANTH (GOMPHRENA GLOBOSA).

Attractive everlasting, producing very freely large clover-like heads of flowers, useful for winter bouquets. Height 2 feet. H. H. A.

- 456 G. Alba.—White..... 5 | 458 G. Aurea.—Golden Yellow..... 5
457 — — Purpurea.—Purple..... 5 | 459 — — Mixed.—Many colors..... 5

GLAUCIUM (HORN POPPY).

- 460 G. Luteum.—Very showy plant, valuable for edging and massing; leaves silvery white and beautifully recurved; flowers yellow, bell-shaped. 2 feet. 5

GLOXINIA.

A magnificent class of tuberous rooted greenhouse plants, with handsome bell-shaped flowers in a diversity of the richest colors. Height, 10 inches. T. P.
461 G.—A mixture of the finest spotted and blotched varieties, saved from an excellent collection..... 25

Gourds.

USEFUL, ORNAMENTAL AND FANCY.

This most curious and interesting family is but little known and we have succeeded in collecting in Europe one of the most complete lists ever offered. The forms may be wonderfully varied by tying strings around the young fruit, or by enclosing the same in a carved mould while growing, thus stamping on its surface any desired figures or letters which may be carved on the mould.

Start the seed in pots in the house and plant as soon as danger from frost is over, as nearly all of the larger sorts require the whole season to mature properly. Give them a sunny situation and plenty of water.

- 467 Bryonopsis.—Scarlet with white stripe..... 5
468 Grossularia.—Gooseberry Gourd..... 5
469 Argyroperma.—Large edible seeds..... 10
470 Dudain.—Fragrant orange fruit..... 5
471 Dipsaceus.—Teazle-like, yellow fruit..... 5
472 Erinaceus.—Hedgehog Gourd..... 5
473 Anguria.—Green and white, large..... 5
474 Metuliferus.—Scarlet, thorny..... 5
475 Tashkent.—New, very high growing species with handsome small white flower..... 10
476 Flexuosus.—Snake Cucumber..... 15
477 Pearshaped.—Green, white striped..... 5
478 Depressa.—Flat Corsica, dark green..... 5
479 Hercules Club.—Large, club shaped..... 5
480 Bottle Gourd.—Largest..... 5
481 Powderhorn..... 5
482 Sugar Trough.—Immense size..... 5
483 Siphon..... 5
484 Turk's Turban.—Very showy, scarlet fruit..... 5
485 Coccinea India.—Scarlet fruit..... 10
486 Farinosa.—Flour Gourd..... 5
487 Longissima.—Grows up to 4 feet long..... 5
488 Jerusalem Bottle..... 5
489 Enormis.—Enormously large fruit..... 5
490 Su-Kawack.—Water bottle..... 5
491 Sirkai-Kawack.—Vinegar bottle..... 5
492 Kalkan-Kawack.—Tobacco box..... 5
493 Nas-Kawack.—Snuff box..... 5
The 4 last named are beautiful, quick growing sorts with highly interesting fruit, used as household furniture in their native land, as the names indicate.
494 Aurantiaca.—Orange shaped..... 5
495 Squirting Cucumber..... 5
496 Sooly Qua.—Fruit 5 to 6 feet long..... 5
497 Ostrich Egg..... 5
498 Dish Cloth Gourd..... 10
499 Many Sorts in finest mixture..... 02. 25c 5
500 Collection of 24 distinct sorts..... 1 00
501 Collection of 12 distinct sorts..... 00
502 Collection of 6 distinct sorts..... 20

SUNFLOWER (HELIANTHUS).

DOUBLE HOLLYHOCK.

GODETIA.

- Desirable garden flowers, very free blooming, succeed in any soil. H. A.
- 503 G. Duchess of Albany.—Flowers of a glossy, satiny white, produced in great profusion. 12 in..... 5
- 504 — Bijou.—Flowers splendid white, with a dark rose spot; very dwarf and dense growing..... 5
- 505 — Lady Abemarle.—Flowers large, of carmine-erimson shade; the edges of the petals suffused with pale lilac..... 25
- 506 — Princess Henry.—See Novelty..... 5
- 507 — Many Varieties.—Choice mixed..... 5

HEDYSARUM (FRENCH HONEYSUCKLE).

- Showy border plants with racemes of pea-shaped flowers. H. B.
- 509 H. Coronarium.—Flowers, red and white..... 5

HELIANTHUS (SUN FLOWER).

Well known class of plants of stately growth; flowers sometimes of enormous size and brilliant color. Height, 4 to 8 feet. The new dwarf kinds are very showy and popular; every garden should have them. H. A.

See also Plant List.

- 510 H. Californicus Fl. Pl.—Extra large size and very double flowers..... 5
- 511 — Oscar Wilde.—Flowers single and small, with jet-black center..... 5
- 512 — Nanus.—Dwarf variety, with very double orange-colored flowers. 3 ft. 5
- 513 — Globosus Fistulosus.—Flowers enormous; globular and of a rich saffron yellow..... 5
- 514 — Argophyllus.—The whole plant is covered with a silk-like silvery felt, the flowers are very numerous, orange with black center..... 5
- 516 — Mammoth Russian.—Of enormous size, flowers single, 18 inches in diameter. Oz., 10c..... 5

HELICHRYSUM (EVERLASTING FLOWERS).

Very popular Everlastings with globular flowers, useful for borders and beds. When used for dyeing, flowers should be picked before fully expanded. H. A.

- 517 H. Monstrosum Fl. Pl.—A mixture of many varieties. 2 feet..... 5
- 518 — Nanum Fl. Pl.—Many dwarf sorts mixed. 1 foot..... 5

HELIOTROPE.

Deliciously fragrant plants, excellent for bedding; also for house culture. Seed sown early will bring flowering plants the first summer. H. H. P.

- 519 H. King of the Blacks.—Very deep..... 10
- 520 — Boule de Neige.—(Snowball)..... 10
- 521 — Dr. Livingstone.—Very fine dark variety..... 10
- 522 — Fine Mixture.—Of dark flowering sorts..... 5
- 523 — Light and dark shades mixed..... 5

HESPERIS (SWEET ROCKET).

Charming plants with sweet scented flowers. Useful for bouquets.

- 524 H. Mixed colors.—(Nachtviole)..... 10

HIBISCUS.

Showy and ornamental annuals, with large and varied flowers. H. A.

- 525 H. Africanus.—Flowers large; cream colored with a brown center..... 10

HOLLYHOCK (ALTHÆA ROSEA).

Old fashioned favorites which should be in every garden. Seeds should be sown in June or July to have flowering plants the next summer or if sown in the house early in spring they will bloom the first year. Height, 4 to 6 ft. H. P.

- 526 H. Double White, Yellow, Crimson, Pink.—Each..... 25
- 527 — Jackmanii.—The returning tide of popularity which has overtaken the Hollyhock, has brought many marvelous improvements of that always showy plant, but this latest Chicago introduction, the Crimson Jackmanii, surpasses all in its attractions. The flower is a bright rich crimson, very large, often measuring 4½ inches in diameter, always double, forming a perfect rosette, and set on a larger stem than is usual.. 25
- 528 — Fine Mixed.—Double..... 10
- 529 — Extra Choice Mixed.—Saved from Exhibition flowers..... 25

For price on Hollyhock roots, see list of Bulbs and Plants.

MOON FLOWER.

HONESTY (LUNARIA BIENNIS).

- The silvery seed pouches are interesting, pretty and ornamental. 2 ft. H. B.
- 530 Honesty.—Flowers purple, borne in racemes..... 5

ICE PLANT (MESEMBRIANTHEMUM).

Suitable for rock work, hanging baskets, etc.; foliage thick and fleshy, and of a frosted, wax-like appearance. H. H. A.

- 531 M. Crystallinum.—Purple flower..... 5
- 532 — Cordifolium Variegatum.—Leaves of a creamy color, fine for carpet-bedding..... 15

IMPATIENS.

- 533 I. Sultani.—A perennial Balsam from Africa, of recent introduction. The plant is of compact growth and produces an abundance of gorgeously colored rosy carmine flowers. It does well in the stove and cool-house, and is one of the most distinct and beautiful plants for decorative purposes 25

IPOMÆA.

Valuable climbing plants, closely allied to Convolvulus, used for covering trellises, arbors, etc. T. A.

- 534 I. Bona Nox.—(Evening Glory).—Violet flowers, large and fragrant, especially in the evening..... 5
- 535 — Rubro Cœrulea.—Gorgeous large flowers of a beautiful sky blue..... 10
- 536 — Scarlatina.—A most beautiful climber from Fernando Po. The flowers are of a magnificent cinnamon-red and are borne in umbels; planted with I. rubro cœrulea the effect is very striking..... 10
- 537 — Leari.—See Specialties..... 10
- 538 — Horsfalliæ.—See Specialties..... 10
- 539 — Grandiflora Alba.—Large, very sweet white flowers..... 10
- 540 — Coccinea.—(Star Ipomœa).—Scarlet flowers in profusion..... 5
- 541 — Noctiflora.—(Moon Flower).—This beautiful climber has made a wonderful sensation in floral circles the past summer; its luxuriance of foliage and splendor of bloom combining to make it the most beautiful of all annual climbers. It bears in the greatest profusion its lovely immense white flowers, five to six inches in diameter, with a five-pointed star in the center; the flowers open at dusk or earlier on cloudy days, at which time they are deliciously fragrant. To obtain the most favorable results, start early in the house and set out as early as safe in the spring; the vines make very rapid growth, often attaining a height of 25 feet in one season. Pkt., 10c.; 3 for 25c.

JACOBÆA (SENECIO).

Beautiful free flowering plants, densely covered with very double distinctly colored flowers. Dwarf sorts are especially adapted to bedding and edgings. H. A.

- 542 S. Elegans Fl. Pl.—Fine double mixed..... 5
- 543 — Nana Fl. Pl.—Double dwarf sorts. Finest mixed. 8 inches..... 5

KAULFUSSIA.

- From Cape of Good Hope. Plants dwarf, compact and free-blooming. H. A.
- 544 K. Amelloides.—Flowers blue; 6 inches..... 5

LANTANA.

A shrub-like plant, bearing numerous clusters of verbena-like flowers in endless variety of colors. Desirable for bedding and as house plants. H. H. P.

- 545 L. Hybrida.—Best hybrids mixed; 3 to 5 feet..... 10

LAPAGERIA.

Lapagerias rank amongst the most beautiful greenhouse climbers in existence. They are especially adapted for training over corridors and around the windows, as here the pendant, waxy flowers are seen to the best advantage. They also succeed on walls and trellises outside if planted in a warm and sheltered situation.

- 546 L. Rosea Grandiflora.—Flowers rich rosy-crimson, large and of beautiful form..... 5 seeds... 25

DON'T FAIL TO INCLUDE IN YOUR ORDER ———
— A PKT. OF VAUGHAN'S INTERNATIONAL PANSY.

MIGNONETTE MACHET.

MUSA ENSETE.

AFRICAN MARIGOLD, ELDERADO.

LARKSPUR (SEE DELPHINIUM).

LATHYRUS (EVERLASTING PEA).

Very ornamental, free-flowering plants, growing in any soil. Useful for covering trellises, verandas, etc. 6 feet. H. P.

547 L.—Mixed..... 5

LINARIA.

Beautiful dwarf plants, well adapted to ribbon beds and rock work. H. A.

548 L. *Reticulata Aurea*.—Has very large flower heads of bright golden yellow and deep purple..... 10

549 — *Cymbalaria*.—(Kenilworth Ivy).—A very pretty climber..... 5

LINUM (FLOWERING FLAX).

550 L. *Grandiflorum Coccineum*.—Scarlet; splendid color, very attractive bedding-plants if planted in a mass. Height, 1 foot. Oz., 20c..... 5

LOBELIA.

A dwarf plant with delicate, graceful foliage and pretty, fine flowers. Of value chiefly for hanging baskets and border work. H. H. A.

551 L. *Erinus Emperor William*.—Dwarf, dark blue, fine..... 10

552 — *Crystal Palace* (Compacta).—Deep blue, dark foliage, the best bedding sort..... 10

553 — *Speciosa*.—Dark blue, best for hanging baskets..... 10

554 — *Prima Donna*.—Distinct novelty, flowers velvety maroon..... 10

555 — *Alba*.—White flowers, pretty..... 10

556 — *White Gem*.—The best white sort for ribbon and carpet bedding..... 10

557 — *Fulgens* (Queen Victoria).—A beautiful border plant with brilliant scarlet flowers and metallic crimson foliage. 3 ft. P.... 25

LOBELIA.

LUPINUS (SUN DIALS).

Desirable bedding plants with long, graceful flower spikes, bearing richly colored, pea-shaped flowers. H. A.

560 L. *Tall Sorts*.—In splendid mixture..... 5

561 — *Dwarf Sorts*.—Choice mixture..... 5

MARIGOLD (TAGETES).

A class of showy and extremely effective plants with fine double flowers of rich and beautiful colors, very well adapted for large beds and bordering. No garden should be without them. H. H. A.

562 M. *Tall African*.—Many varieties mixed. 2 feet..... 5

563 — *Eldorado*.—This is the most beautiful of all the Marigolds, its colors ranging from palest primrose yellow, lemon and gold to the deepest orange. The flowers are very large and almost round, often three to four inches in diameter, very double and deeply imbricated, as shown in the illustration, sometimes fringed or laced. This plant is unexcelled for brilliance in large beds and borders. Pkt., 10c.; 3 for 25c.

564 — *Dwarf French*.—A mixture of many shades. 1 foot..... 5

565 — *Gold Striped*.—Flowers of a rich deep maroon, with stripes of golden yellow; the plants grow 8 in. high by a diameter of about 12 in., forming neat round bouquets, studded with large, handsome flowers..... 10

566 — *Aurea Fistulosa Pl.*—Golden yellow, profuse bloomer, extra..... 10

567 — *Collection of 8 varieties of French Marigold*..... 30

568 — " " " " *African Marigold*..... 25

LOPHOSPERMUM.

Very graceful climbers of quick growth, excellent for hanging baskets. Flowers large, resembling the Fox Glove. Height, 10 feet. H. H. A.

569 L. *Scandens*.—Flowers rosy purple..... 10

MARVEL OF PERU (MIRABILIS OR FOUR-O'CLOCK).

Large growing shrub-like plants, with funnel-shaped flowers of many colors. They derive their name from their curious habit of expanding in the afternoon. Height, 2 feet.

570 M.—Many varieties mixed..... per oz. 40c. 5

571 — *Collection of 8 distinct colors*..... 30

MATRICARIA (FEVER-FEW).

Handsome free-flowering plants, good for beds and pot culture. H. H. P.

572 M. *Eximia Crispa Fl. Pl.*—Lovely little plants with double white flowers and prettily curled foliage like parsley. 8 inches..... 10

573 — *Capensis*.—Double white flowers, splendid for bouquets, etc..... 5

MAURANDIA.

A most beautiful climber of rapid and slender growth, producing an abundance of pretty tube-shaped flowers, which continue blooming until late in Fall. Height, 10 feet. H. H. P.

574 M. *Barclayana alba*.—White. 10 | 576 M. *Rose*..... 10

575 — *Crimson*..... 10 | 577 — *All Colors*.—Mixed..... 10

MIGNONETTE (RESEDA ODORATA).

A well known annual with spikes of deliciously fragrant flowers. Indispensable in every garden. H. A.

578 M. *Grandiflora*.—Large flowered; per oz., 20c..... 5

579 — *Ameliorata*.—Very sweet scented; per oz., 15c..... 5

580 — *Parsons' White*.—A distinct almost white variety, with long spikes..... 5

581 — *Gabriele*.—New, red flowering; very sweet, spikes very thick; one of the best for florists' use..... 10

582 — *Nana Compacta Multiflora*.—Dwarf; flowers red; fine for pots..... 10

583 — *New Hybrid Spiral*.—Is a vigorous grower, with spikes often attaining a length of 10 inches; delightfully fragrant..... 10

584 — *Machet*.—This extremely fine variety is undoubtedly the best Mignonette yet sent out. The dwarf and vigorous plants are of pyramidal growth, producing very thick, stout flower stalks, throwing up numerous dark green leaves, which terminate in long, broad spikes of deliciously scented red flowers. IT IS THE BEST SORT FOR POT CULTURE. 10

585 — *Golden Queen*.—An entirely distinct sort, with golden yellow flowers, which give it a most attractive appearance; very fragrant..... 10

586 — *Bird's Mammoth*.—Flower spikes of immense size, often measuring from 8 to 9 inches in length, and having a very powerful fragrance..... 10

587 — *New Double*.—See novelties..... 10

588 — *Collection of six different varieties*..... 40

589 — *Mixture of many varieties*..... 5

MUSA ENSETE (ABYSSINIAN BANANA).

590 This is one of the grandest and most picturesque of the Banana family; as a solitary plant or in groups on the lawn it has a very majestic and tropical effect. The leaves are very long and broad, of a beautiful green, with crimson midrib in striking contrast. If planted in a warm spot, in a well-manured mixture of leaf mold, rich loam and sand, it will attain a height of from ten to eighteen feet. An occasional application of liquid manure and frequent watering are necessary. If the seed is sown early in hot-bed and repotted several times, the plants will attain a height of over ten feet the first summer. The rapidity of its growth is astonishing. The fruit is not edible. Per packet of 5 seeds, 25c.

MINA LOBATA.

A charming Mexican climber which somewhat resembles the Cypress Vine, except in color and shape of flowers, which are tube-shaped, borne on fork-like racemes and produced in great profusion. In color they are particularly attractive, the buds being first of a bright red but changing through orange yellow to creamy white when fully expanded. The foliage is very handsome, dense and luxuriant. The plant is of very vigorous growth and attains a height of from 18 to 20 feet. T. A. 25

MIMULUS (MONKEY FLOWER).

A very interesting free-blooming genus of plants with beautiful spotted and blotched flowers of brilliant colors. Succeeds best in shaded and damp situations. H. H. P.

- 591 *M. Tigrinus*.—A showy variety with flowers handsomely blotched, in many colors. 5
592 — *Flore Pleno*.—A new double variety in mixed colors; very pretty. 25
593 — *Moschatus*. (Musk Plant).—The thin delicate leaves emit a delicate musk odor. 10
594 — "Emperor."—See novelties.

MORNING GLORY (SEE CONVULVULUS).**MOURNING BRIDE (SEE SCABIOSA).****NEMOPHILA (LOVE GROVE).**

A dwarf, very free-blooming class with very richly colored flowers; succeeds best in a shaded and moist situation. Height, 1 foot. H. A.

- 595 *N. Insignis*.—Brilliant blue, white centre. 5
596 — *Discoidalis*.—Black, white margined. 5
597 — *Maculata*.—White, with purple spots. 5
598 — Fine Mixed. 5

NIGELLA.

Free-blooming plants with white and blue flowers and very graceful foliage. Grows in any garden soil. Height, 1 foot. H. A.

- 599 *N. Hispanica* (Love in a Mist).—Blue. 5

PETUNIA—BLOTCHED AND STRIPED.

- 643 — *Countess of Ellesmere*.—Pink, white throat; good bedding sort. 5
644 — *Blotched and Striped*.—Flowers with star-shaped blotches of symmetrical form, very desirable for beds and pot culture. 10
645 — *Star of Lyons*.—See novelties. 15
646 — *Alba*.—White, suitable for cemetery. 10
647 — *Finest Mixed*.—A very choice strain. 10
648 — *Good Mixed*.—Many colors. Per oz. \$1.00 5

Large Flowering Sorts.

- 649 — *Superbissima*.—Extra large flowers with black or white beautifully veined throats, in mixture. 25
650 — *Prince of Wuertemberg*.—Crimson purple, with deep handsomely veined throat. 25
651 — *Princess of Wuertemberg*.—Beautiful rose color, with deep white throat with maroon veining. 25

The two preceding varieties belong to the *Superbissima* type, which are among the finest of the Petunias; the flowers are generally from 4 to 6 inches in diameter, the plants of very sturdy, bushy habit, and we can faithfully recommend them to all lovers of these pretty flowers.

Please remember that \$2.00 buys seeds in packets amounting to \$2.50, besides the premium offered on the order sheet.

Don't fail to add a packet of the Shirley Poppies to your order.

PETUNIA

Charming free-blooming effective plants of easy cultivation. The hybrid sorts are especially fine in mixed borders and beds, while the larger flowering kinds with their delicate colors and pervading fragrance are deserving favorites for pot culture. The seed we offer has been saved from the choice strains only, and is sure to produce fine, well developed flowers.

642 *P. Dwarf Inimitable*.—Each plant forms a complete bush 5 to 8 inches high, and is covered with brilliant cherry-red flowers, each being marked with a clear white star. It is invaluable for carpet bedding and pot culture. 15

HYBRIDA.

- 652 — *Maculata*.—Very large-flowering, blotched and striped. 25
653 — *Kermesina*.—Extra large, brilliant crimson. 25
654 — *Black Prince*.—Finest dark velvety-violet, magnificent color. 25
655 — *Fringed*.—A fine strain with handsomely frilled and fringed flowers, very distinct and pretty. 25
656 — *Marginata*.—Very interesting variety with a deep and distinct margin of green, mixed shades. 25
657 — *Yellow Throated*.—The flowers are very large and of perfect form, with a broad deep yellow throat, veined very much like a *Salpiglossis*. 50
658 — *Collection of Large Flowering Single Petunias*, 12 varieties, \$1.00.
659 — *Collection of Large Flowering Single Petunias*, 6 varieties, 60c.

PETUNIA, LARGE FLOWERING.

Double Flowering Sorts.

The seed of the double varieties is obtained by artificial fecundation, and about 35 per cent. of fine double flowers may be expected.

- 660 — *Dwarf Double Liliput* (*Nana Compacta Multiflora Fl. Pl.*)—New double kind, producing bushy plants, covered with small double flowers, which are partly spotted, blotched and self colored, making a very pretty plant when in full bloom. 25
661 — *Flore Pleno*.—Best large flowering double in finest mixture. 25
662 — *Extra Large Flowering, Double Fringed*.—This extra choice strain produces about 30 per cent. of splendid double fringed flowers. 50
663 — *Extra Large Flowering, Double Fringed*, "Lady of the Lake".—This seed will produce about 30 per cent. large double white fringed flowers. 50
664 — *Collection of Double Fringed Petunias* of 6 vars. 75c.

Portland, Me., Nov. 9, '88.—The "Mikado Collection, 10 kinds" did well under her tender care. The "Vaughan's Mixed Pansies" were also all she could desire—a perfect success; and a nice selection on your part.

Maj. John M. Gould, Secy.

If you receive two of our Catalogues you can do us a great favor by landing one to a neighbor who uses seed.

VAUGHAN'S PANSIES

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Clay Centre, Kans., Dec. 7, '88.
--The flower seed I got of you
proves to be very fresh and good.
About every seed has come up.
E. L. Brower.

For several years we have had in the purchase of Pansy seed the most critical customers among our wholesale growers of cut flowers, which we handle in large quantities at Chicago, and stimulated by their demand for the best at any price, and our own desire to supply it, we have bought every strain offered, which bore any assurance of improvement.

After careful comparative tests of the seeds from dozens of growers, home and foreign, we secured a strain which is renowned all over continental Europe for the marvelous markings and infinite variety in the coloring of his flowers, and we have found them to be all that could be claimed for the greatest perfection in the culture of this favorite. We have chosen such distinct, striking and peculiar types as are most rare and beautiful, and we can faithfully recommend them as extraordinary, choice and fine.

©—VAUGHAN'S PREMIUM STRAIN.—©

We supply ANY of the following varieties at 25c. per packet; 5 packets for \$1.00; 11 packages for \$2.00.

CHICAGO PARKS BEDDING PANSIES.

We have sold this strain in separate colors for a number of years, and they have given the best of satisfaction.

Beaconsfield.	Odie.	Gold-Margined.
Black.	Bronze, Dark.	Dark Purple.
Dark Blue.	Copper Scarlet.	Light Blue.
Emperor William.	Pure Yellow.	White.
Striped or Fancy.	Pheasant's Eye.	Silver-edge.

Golden Gem.—New; clear golden yellow without the black centre.

ENGLISH "Face Pansy."—So called because each flower shows a distinct face. They are of a fine bright blue color, blotched with a very deep blue; good shape and size; the plant has a sturdy habit.

Any of above, per pkt., 5c.; 6 for 25c.; 12 for 50c.

717 Extra Choice Mixed, all the above.—Packet 5 cents;

718 Pansy.—Many shades and colors in good mixture. Pkt., 5c.; ¼ oz., 50c.

NEW GIANT PANSIES.

This new and entirely distinct race of pansies is fast growing in favor and we are glad to add a few more new colors to our list.

GIANT CASSIER.

GIANT BUGNOT New, very choice.

GIANT DARK BLUE

GIANT TRIMARDEAU Yellow.

GIANT TRIMARDEAU Purple.

GIANT TRIMARDEAU white with eye.

GIANT TRIMARDEAU, Mixed.

GIANT COAL BLACK.—Very fine.

GIANT PANSIES, very fine mixed.

Per packet of any of above 25c.; 5 for \$1.00.

693 VAUGHAN'S INTERNATIONAL MIXTURE OF PANSIES.—

As described on second front cover page, the finest mixture in existence

Per Pkt. 25c.; 5 for \$1.00.

LaMoille, Ill.—The Premium Pansies were as nice as I ever saw, the flowers increasing in size until heavy frosts.

W. G. Porter.

665 Odier, or Five Blotched.—A magnificent French variety, each petal having a large blotch, with clearly defined margin; colors in many different variations; extra large.

666 Lord Beaconsfield.—Doubtless one of the most elegant Pansies in cultivation. The ground color is purple violet, shading off in the top petals only to a whitish hue.

667 Fancy, or Striped.—An improved strain with curiously-edged, flamed or striped flowers in an infinite variety of beautiful colors.

668 Quadricolor, or Pheasant's Eye.—One of the prettiest and most peculiar sorts; the flowers are of a reddish steel blue, with red and white edge.

669 Silver-Edge.—Dark purple violet with clear silvery white edge.

670 Snow Queen.—Pure white.

671 Emperor William.—Ultramarine blue.

672 Black with Gold Bronze.—Very showy and distinct.

673 Deep Yellow.—Rich orange.

674 Dr. Faust, or King of the Blacks.—Deep jet black, a beauty.

675 Havana Brown.—Glossy brown.

676 Light Blue.—Delicate shades.

677 Marbled Mixed.—A handsome combination of colors on various grounds.

678 Black with Red and White Margin. An elegant combination.

692 Vaughan's Premium Pansies in Splendid Mixture.—Embracing all varieties named in foregoing list and many other shades and colors. Per packet, 25c.; 5 for \$1.00.

Hyde Park, Ills., Aug. 16, '89.—The Pansy seed received from you last March, we could not do justice to, too late, but would say from what we saw, that it was in every respect first class; you can recommend it as a superior strain in every respect.

John Goode & Co., Florists.

NASTURTIIUM.

(or TROPÆOLUM).

The dwarf varieties of Nasturtium are among the most useful and beautiful of annuals for bedding, massing, etc., owing to their compact growth, richness of color and profusion of blooming. The tall sorts are admirably adapted for rock work, covering trellises or rustic work. They flower most profusely when planted in a poor soil, and remain in bloom for a long time; stand heat and drought without the slightest effect. The seed, if pickled young, is an excellent substitute for capers. H. A.

Tom Thumb or Dwarf Sorts.

- 615 Pearl.—Creamy white.
 616 Rose.—Very desirable.
 617 King of Tom Thumbs.—Intense scarlet flowers and dark foliage.
 618 King Theodore.—Bluish green foliage, flowers, deep velvety crimson.
 619 Ladybird.—See novelties.
 620 Crystal Palace Gem.—Sulphur-yellow with maroon spots.

- 621 Empress of India.—Splendid new dwarf variety, with very dark leaves and crimson flowers.
 622 Golden King.—Brilliant yellow.
 623 Ruby King.—Of a peculiar bluish tinted red.
 624 Many Varieties.—Mixed; per ounce, 25c.
 625 Collection.—Six separate colors 25c.

EMPERESS OF INDIA.

Majus or Tall Varieties.

- 626 Straw Color.
 627 Dunnet's Orange.—Pretty.
 628 Scarlet.

- 628 Scarlet Striped.—Very handsome.
 630 Crimson.
 631 Many Varieties.—Mixed, per oz. 20c.

All of the above kinds at 5 cts. per packet.

— Tropæolum Lobbianum. —

The Lobbianum varieties constitute without doubt, some of the finest of our annual climbers; they are somewhat delicate, but extraordinary free-blooming, and also desirable for house culture. Should not be planted in too rich soil.

632 L. Spitfire.—Bright scarlet; very showy.....	10	637 — Cardinale.—Magnificent new sort, dark scarlet.....	10
633 — Giant of Battle.—Sulphur, spotted with red.....	10	638 — Lucifer.—Bright scarlet flowers, dark foliage.....	10
634 — Lily Smith.—Scarlet.....	10	639 — Many Colors.—Fine mixed.....	10
635 — King of the Blacks.—Black brown.....	10	640 — Canariense.—(Canary Bird Flower). Flowers	
636 — Napoleon III.—Golden yellow, spotted brown.....	10	beautiful golden yellow, and of handsome shape.....	10

TROPÆOLUM LOBBIANUM.

TYPES OF OUR LARGE FLOWERING PHLOXES.

PHLOX DRUMMONDI.

A very pretty hardy annual, invaluable for bedding, masses and cut flowers, from its bright colors, which vary from the purest snow white to the deepest blood red, and the unusual length of its blooming season. There is no annual which can compare for beauty, duration of bloom, brilliancy of colors and usefulness to the Phlox. We have an excellent strain. Height, 1 foot. H. A.

725 P. Alba.—Pure white.....	5	727 — Rosea.—Pink; beautiful	5
726 — Brilliant scarlet.....	5	728 — Atropurpurea, Deep red	5
729 — William I.—Crimson; striped.....	5		
730 — Hortensiaeflora.—Large umbels of shining rose-colored flowers.....	5		
731 — Striata.—Striped, white and rose.....	5		
732 — Isabellina.—Yellow.....	5		
733 — STAR OF QUEDLINBURG.—See novelties.....	10		
734 — CUSPIDATA.—See novelties.....	25		
735 — Many Colors.—Mixed.....	1/4 oz. 30c		
736 — Collection of 12 distinct colors.....	45		
737 — Collection of 6 distinct varieties.....	25		

New Phlox Drummondii "Graf Gero."

This new strain forms compact plants, well adapted for pot culture.

- 738 — "Phlox Graf Gero."—Mixed colors..... 10

New Double White Phlox.

739 — In this new variety we have the first DOUBLE PHLOX yet introduced. It produces about 60 to 70 per cent. of PERFECTLY DOUBLE flowers of an exquisite pure white color and handsome shape. The importance of this novelty both to the florist and amateur will be recognized at once..... 10

Phlox Grandiflora—Large Flowering.

The large flowering kinds are a decided improvement on the Drummondii, producing flowers twice the size of the latter with the most brilliant colors imaginable.

740 — Alba.—White.....	10	743 P. Rosy Carmine, white eye	10
741 — Intense Scarlet.....	10	743 — Rosea.—Pink, white eye.....	10
742 — Splendens.—Vivid crimson; large white eye.....	10		
744 — Stellata Splendens.—This fine variety resembles the Splendens, with the addition of a clearly defined pure white star, contrasting strikingly with the vivid crimson of the flowers.....	10		
745 — Large Flowering.—In splendid mixture.....	1/2 oz. 25c		
746 — Collection of 12 distinct colors.....	75		
747 — Collection of 6 distinct colors.....	45		

Phlox Nana Compacta—New Dwarf Sorts.

A quite distinct strain of dwarf and compact growth; very desirable for pot culture and ribbon bedding. 9 inches.

749 — Nana Fireball.—Fiery scarlet.....	15
750 — Snowball.—Pure white.....	15
751 — Queen Victoria.—Splendid scarlet flowers.....	15
752 — Chamol's Rose.—Handsome shade of flesh color.....	15
753 — Delicatissima.—See novelties.....	25
754 — Dwarf Sorts.—Choice mixture.....	10

HARDY PHLOX.—(Phlox decussata).

These rank among the finest herbaceous perennials for beds or borders.

- 755 Phlox Decussata.—Mixture of the finest flowers..... 10

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• VAUGHAN'S POPPIES. •

Showy and ornamental plants with large flowers of brilliant colors. Very attractive in large beds, clumps and mixed borders. They are of very easy culture, and succeed in any garden soil; the seed should be sown where it is to remain, as they do not stand transplanting. 2 ft. H. A.

Single Varieties.

- 780 **P. Danebrog.**—Flowers of a brilliant scarlet, bearing a silvery-white spot on each of the four petals..... 5
 781 — **Umbrosum.**—Rich vermilion, with a deep shining spot..... 5
 782 — **New Persian.**—See novelties..... 25
 783 — **Victoria Cross.**—A true brilliant cross of white which extends through on both sides of the petal, while the larger outside surface is a rich vermilion crimson. It can be called the "Jubilee" poppy, having been named in honor of Queen Victoria. Every one knows how easily Poppies are grown and this is no exception..... 10
 784 — **NEW PEACOCK.**—Of dwarf habit, about 1 ft. high, and throws up numerous stems, each bearing clusters of flowers. The most striking feature of the flower is the conspicuous glossy black zone which marks the petals near the base, the united bands forming a complete ring, equally apparent on both surfaces, which shows to great advantage on the brilliant scarlet ground color during the early part of the day..... 10
 785 — **MEPHISTO.**—The flowers are a glowing dark scarlet, and resemble the Danebrog Poppy, with the exception that the white markings of the latter are replaced by rich velvety jet black blotches which form the shape of a cross, contrasting strikingly with the rich scarlet of the petals..... 10
 786 **New Shirley and 787 — Fairy Blush.**—See novelties.

Double Varieties.

- 790 — **Somniferum Fl. Pl.**—(Double Carnation Poppy.)—Fine double fringed flowers, mixed colors..... 5
 791 — **Imported Collection** of 12 separate colors..... 45
 792 — **Imported Collection** of 6 separate colors..... 20
 795 — **Rhœas Fl. Pl.**—(Double French Poppy.)—Double mixed..... 5
 796 — **Pæony-Flowered.**—Double mixed..... 5
 797 — **Imported Collection** of 6 separate colors..... 20
 798 — **Hookeri Fl. Pl.**—Double flowered varieties; beautiful shades..... 10
 799 — **SNOWDRIFT.**—This charming new Poppy produces pure snowy white extremely double flowers of perfect form and large size. The habit of growth is very neat and compact, and we have in this variety a most valuable acquisition..... 5
 800 — **DOUBLE DANEBROG.**—This new variety has been developed from that known as single P. Danebrog, and has, like this, flowers of a brilliant deep red, each of the petals being marked at the base with a silvery white blotch, giving it the appearance of a white cross on a rich red ground. Exceedingly charming..... 10
 801 — **Umbrosum Flore Pleno.**—Flowers of a glowing vermilion with a deep black spot on each petal, very showy..... 5
 802 — **Double Japanese Pomponé.**—Flowers are small but very double and very numerous; they range through many lovely shades..... 15
 803 — **THE MIKADO.**—One of the most charming Poppies, introduced from Japan. The petals are whole at the base while the edges are frilled in the most pleasing manner. The flowers are of a pure white at the back while the fringed edges are of brilliant scarlet. This is undoubtedly one of the most effective annuals..... 15
 804 — **Mixed.**—All varieties and colors mixed..... 5

Perennial Varieties.

- 805 — **Papaver Orientale.**—Deep scarlet with a dark purple spot at the base of each petal; one of the showiest of hardy perennials..... 10
 806 — **Alpinum.**—Flowers yellow, rose-tinted, very pretty, 6 in..... 10
 807 — **Croceum.**—Orange-yellow or saffron, large and very showy..... 10
 808 — **Nudicaule.**—One of the most useful, effective and beautiful perennials, and is sure to give satisfaction in borders or for beds. Flowers bright yellow..... 10

POLYANTHUS.

- These rank undoubtedly among the prettiest of plants for border, rockeries, etc. When once established they grow in any common soil, but they succeed best in rich soil, and a position somewhat moist and shaded. 1 ft. H. P.
 809 — **Goldlaced, Mixed.**—The flowers have a clear, even margin, or lacing of gold on a ground-color, similarly well defined; extra choice mix..... 25
 810 — **Mixed Varieties.**..... 10
 811 — **Hose in Hose Mixed.**—Very curious and pretty; one flower set within another..... 25

PORTULACCA (MOSS ROSE).

For brilliant, beautiful and delicate flowers, these lovely plants have no equal. Whether used in baskets, beds or edgings, their splendid flowers, produced in great profusion, are very effective; succeed best in light sandy soil, and want to be exposed to the full glare of the sun. Height, 6 inches. H. A.

812 — P. White	5	814 — Pink	5
813 — Scarlet	5	815 — Yellow	5
816 — Mixed			5
817 — Many colors extra choice mixed			5

Double Sorts.

818 — Double White	15	820 — Scarlet	15
819 — Pink	15	821 — Golden Yellow	15
822 — Mixed —Choice double flowers.....			10
823 — Collection of 6 distinct colors			75

POTENTILLA.

- 824 **P. Formosa.**—One of the most charming of hardy perennials, growing about 2 feet high and producing numerous flowers of a bright cherry red. 10

PRIMULA (CHINESE PRIMROSE).

Charming, profuse blooming plants, indispensable for Winter and Spring decoration in the house. Seed should be sown in February or March in a light, sandy soil, but slightly covered and kept moist. Transplant as soon as the second leaves appear, and continue shifting the plants as they grow. Our seed is from the best European collections; and is in quality second to none.

825 — Sinensis White	25	827 — Brilliant Crimson	25
826 — Bright Red	25	828 — Single colors mixed	25
829 — Punctata Elegantissima. —Deep velvety crimson, spotted white.....	50		
830 — Double white, soc.	831 — Double red, soc.	832 — Double mixed	50

Hardy Primroses.

Beautiful early spring flowers, fine for borders, rockwork, etc.; the flowers are borne in umbels on stalks 4 to 6 inches long.

- 833 **Primula Vulgaris.**—The old fashioned common yellow Primrose..... 10
 834 — **Japonica**—(Japanese Primrose.)—One of the most beautiful hardy perennials in cultivation. Flowers crimson, maroon, lilac, rosy-pink or white. Seed is slow to germinate..... 10
 835 — **Cortusoides.**—(Siberian Primrose.)—Beautiful rose color..... 10
 836 — **Cashmerianum.**—A handsome variety with flowers of a light purple, with a yellow eye. Should have protection in winter..... 15
 837 — **Auricula.**—Extra choice mixed..... 25
 838 — **Obconica.**—See novelties.

PYRETHRUM (FEVERFEW).

Yellow Foliage Sorts for Bedding.

- 839 — **Aureum** (Golden Feather). Foliage bright golden yellow. 1/2 oz. 30c 10
 840 — **Golden Gem**—Double white flowers and golden yellow foliage. 10
 841 — **Selaginoides.**—(Fern-leaved).—Distinct. The neat golden foliage resembles two fern-fronds, the one overlapping the other..... 10

Hardy Flowering Varieties.

- Showy, hardy, herbaceous perennials, with very bright flowers which remain in bloom for a long time.
 842 — **Single Large-flowering Hybrids** finest mixed..... 10
 843 — **Double Large-flowering Hybrids**, best mixed..... 25

RHODANTHE.

Well known everlasting flowers, valuable for winter bouquets, but equally desirable as a bedding plant and for pot culture. 1 ft. H. H. A.

844 R. Atrosanguinea. —Flowers purplish crimson; very fine.....	10
845 — Maculata. —Rosy crimson, with yellow centre.....	10
846 — Alba. —Silvery white.....	10
847 — Double. —Bright rose.....	25

RUDBECKIA.

- 848 **R. Newmani.**—One of the best of our hardy border plants, producing its showy golden-yellow and black flowers in great profusion during the autumn. The flowers furnish splendid material for bouquets..... 10

DOUBLE PORTULACCA.

Moline, Ill., Oct., '88
 —Your seed was very good. E. P. Lindstrom.

RICINUS (CASTOR OIL BEAN.)

Stately strong-growing plants, with very ornamental foliage, particularly well adapted as centre plants of groups of Cannas, Japanese Maize, Caladiums, Dahlias, etc. Height 4 to 15 feet. H. H. A.

- 865 *R. Borboniensis* Arboreus.—15 ft high; showy 5
866 — *Africanus*.—Very large. 10 ft. 5
867 — *Cœrulescens*. 5
868 — *Sanguineus*.—A distinct variety with beautiful brownish red foliage; very effective. 5
869 — *Giganteus*.—Immense foliage; 15 feet high. 5
870 — *Gibsoni*.—Dark purple stem and leaves; very ornamental. 5
871 — Mixture.—Many sorts. 5

SALPIGLOSSIS.

A class of highly ornamental Autumn-flowering plants with beautifully veined and tinted funnel-shaped flowers, rendering them very effective in beds and borders. A very choice Annual. Height 1½ feet. H. H. A.

- 875 *S. Grandiflora*.—Fine mixture of the new large-flowering varieties. 5
876 — Collection of 6 separate colors of the large-flowering varieties. 25

SALVIA (FLOWERING SAGE).

Valuable bedding plants with long spikes of flowers of most striking colors. H. H. A.

- 880 *S. Patens*.—The purest and brightest blue of all blue flowers. Height 2 feet. 25
881 — *Coccinea*.—Deep crimson. 8 inches. 5
882 — *Splendens*.—Brilliant scarlet. 3 feet. 5
883 — *Argentea*.—Handsome large silvery white foliage 10

SANVITALIA.

Dwarf trailing plants with very double bright golden yellow flowers, suitable for rock work. Height, 6 inches. H. H. A.

- 886 *S. Procumbens* Fl. Pl.—Double yellow. 5

SAPONARIA (BOUNCING BET).

Handsome dwarf-growing plants with pretty star-shaped flowers; excellent for massing and edging. Height, 6 in. H. H. A.

- 887 *S. Calabrica*.—Deep rose. 5

SCABIOSA (MOURNING BRIDE).

Very useful and ornamental plants with rich and beautifully colored flowers; equally effective for beds or borders; excellent for cutting. H. H. A.

- 890 *S. Major* Fl. Pl.—Tall varieties, splendid mixture. 5
891 — *Candidissima*.—Double white flowers, useful for bouquets. 1 foot. 10
892 — *Nana* Fl. Pl.—Dwarf, flowers extremely double, and valuable for bouquets. 1 foot. Many colors mixed. 5
893 — *NEW LARGE-FLOWERING*.—The flowers are extremely large, averaging 3 inches across and very double, one of the finest hardy annuals and valuable for bouquets. Finest mixed. 5

Hardy Scabiosa.—(Scabiosa Caucasica.)

- 894 *S. Caucasica*.—This is one of the handsomest hardy perennials in cultivation. The flowers are of a peculiar soft lilac-blue shade and last a long time out of water, which fact renders them most valuable cut flowers. It attains a height of 2 to 3 feet and thrives in any common soil. 10

SCHIZANTHUS (BUTTERFLY FLOWER).

- 895 *S. Pappilionaceus* Pyramidalis.—In this charming variety we have one of the finest annuals in cultivation. The flowers are handsome as some of the orchids. 5

SEDUM (STONE CROP).

A dwarf little plant growing freely on rock work, vases, old walls, etc. Height, 3 in. H. H. A.

- 898 *S. Cœruleum*.—Blue. 5

SENSITIVE PLANT (MIMOSA)

- 900 *M. Pudica*.—A very interesting plant with fern-like foliage, which is so sensitive that the leaves close up immediately when touched or shaken. H. H. A. 5

SILENE (CATCHFLY).

Beautiful Spring bedding plants of dwarf growth, and covered with bright colored flowers. Height, 1 foot. H. H. A.

- 904 *S. Armeria*, Mixed.—Flowers red, white and rose. 5
905 — *Pendula Compacta*.—Dwarf and compact; flowers bright pink; excellent border plant. 5
906 — *Alba*.—White; like preceding except in color. 5
907 — *Fl. Pl.*—Double, rosy pink, very effective. 5

SMILAX (MYRSIPHILLUM).

- 909 — Perennial tuberous-rooted climber with dark glossy foliage and small white flowers; one of the most desirable greenhouse climbers. 10

RICINUS SANGUINEUS.

SCABIOSA.

SALPIGLOSSIS.

Xenia, O., Nov. 8, '88.—The seeds you sent me produced the finest and handsomest bed of Zinnias that was ever seen around here. There were all the colors blended together, some striped, blotched and very double. The Victoria Forget-me-not was also very beautiful, admired by all who saw it. The Phlox Grandiflora did very well.

Mrs. S. C. Rodgers.

Weaverville, Calif. Nov. '88.—I can fully recommend both the Nicotiana Affinis and your Large-flowering Phlox, having met with perfect success in each instance.

Mrs. Louisa Stittler.

SOLANUM.

A shrub with fine foliage, but especially admired for its small pepper-shaped scarlet fruit.

- 910 — *Capsicastrum* (Jerusalem Cherry). 5
911 — *Hendersoni*.—Orange-scarlet berries, excellent ornamental pot plant. 10
912 — *Weatherill's* Hybrids.—Very choice. 5

STATICE.

- 915 *Suworowi*.—The branching flower spikes of this new annual Statice are of a bright rose, shaded with crimson. Each plant produces from ten to fifteen spikes, measuring from 12 to 18 inches. One plant will last in flower more than two months, and if sown in succession it may be had in bloom throughout the whole Summer and Autumn. 10
916 — *Superba*.—See novelties. 10

SWEET WILLIAM (DIANTHUS BARBATUS).

A favorite of the old-fashioned garden; flowers richly colored and produced in large brilliant heads, which are very effective in beds or planted among shrubbery. H. P.

- 920 *Sweet William*, Single.—Many colors mixed. 5
921 — *Auricula* Flowered, Mixed.—A beautiful mixture of "eyed" single varieties. 10
922 — *Double*.—Many colors choice mixed. 10
923 — *Albus Plenus*.—Double white. 10
924 — *Atrosanguineus* pl.—Double dark blood red. 10

STEVIA.

Very pretty perennials, which furnish excellent material for bouquets. They grow about 18 inches high and bloom from seed the first year.

- 927 *S. Serrata*.—Flowers white, star-shaped, leaves fragrant. 2 feet. 10
928 — *Purpurea*.—Flowers pinkish-red, very useful for bouquets. 18 in. 5

SWEET SULTAN (CENTAUREA MOSCHATA).

Sweet scented, profuse flowering, showy plants, of easy culture, and very effective in shrubbery. H. A.

- 930 *S. Mixed*.—Blue, purple and white. 5

TAGETES.

A dwarf compact, bushy plant of globular shape, with beautiful fern-like leaves, densely covered with flowers; valuable bedding and border plant. H. H. A.

- 932 *T. Signata* pumila.—Bright yellow, striped brown. 5

THUNBERGIA.

Beautiful climbers for greenhouse or some sunny spot in the garden. They are very profuse bloomers and have handsome foliage and flowers. Height, 4 feet. H. H. A.

- 934 *T. Alata*.—Buff, dark eye. 5
935 — *Alata Alba*.—White, dark eye. 5
936 — *Aurantiaca*.—Orange, dark eye. 5
937 — *Bakeri*.—Pure white. 5
938 — *Mixed*.—All colors. 5

TORENIA.

Most beautiful plants of trailing habit; excellent for house culture, suspended baskets and open ground. They produce flowers in great profusion, and are worthy of general cultivation. 8 inch. T. A.

- 940 *T. Fournieri*.—Large sky-blue flowers with three indigo blue spots and a bright yellow throat; is an exceedingly free bloomer. 15

- 941 — *Baillonii*.—Deep yellow and maroon. 10

STEVIA
SERRATA

SANVITALIA PROCUMBENS FL. PL.

WHITE PERFECTION STOCKS.

SWEET PEAS.

Very beautiful, free-blooming climbers. One of the most popular flowers we sell; so satisfactory under the most ordinary treatment, and so universally a favorite flower for personal wear or table decoration. We offer an English importation of the finest old and new colors. Prized not only for the beauty of the flowers, but also for their delightful fragrance; easily grown, and invaluable for trellis work, covering walls, unsightly objects, etc. 6 feet. H. A.

No Garden is complete without them.

960 White.—Useful for bouquets.	964 Purple.—A deep rich shade.
961 Striped.	965 Black.—Odd and showy.
962 Butterfly.—Pure white, with a border of lavender blue.	966 Painted Lady.—Pink and white.
963 Crown Princess of Prussia.—Bright bluish, shading to rose.	967 Scarlet Invincible.—Brilliant scarlet flowers.

Any of above, per pkt., 5c.; oz. 20c.

968 VESUVIUS.—The petals are brilliant rose, shading to a deeper hue, and spotted carmine; the lower petals are shaded lilac.	10
969 ADONIS.—Most charming, bright rosy color.	5
970 THE QUEEN.—The light rosy standard forms a pleasing contrast to the delicate mauve wing.	10
971 INVINCIBLE CARMINE.—Intense crimson carmine, quite distinct	10
972 PRINCESS BEATRICE.—Rich and beautiful carmine rose, slightly shaded with lighter and darker tints.	10
973 — Many Colors Mixed.—Per pkt., 5c.; oz. 10c.; ¼ lb. 30c.; lb. \$1.00.	

SEE ALSO NOVELTIES.

Fernville, Mich. 9, 5, '88.—I bought flower seeds of you in the Spring, and am pleased with them. My Sweet Peas are most beautiful, as is also the Phlox Drummond.

Mrs. Lottie R. Rogers.

SWEET PEAS.

VERBENA.

Verbenas are easily grown from seed. If sown early in spring they will flower quite early in the season, and continue until destroyed by frost. Owing to their dwarf habit of growth and brilliancy of color, they are indispensable for bedding and edging, and furnish many flowers for cutting. The seed we are offering have been saved from one of the finest collections. H. H. P.

980 V. Candidissima.—Pure white.....	10
981 — Defiance.—Brilliant scarlet.....	10
982 — Italian Striped.—Very handsome....	10
983 — Purple.....	10
984 — Dark Blue with white eye.....	10
985 — Coccinea Follis Aureis.—A very interesting variety with golden yellow foliage, which forms a striking contrast to the deep crimson of the flowers.....	25
986 — New Dwarf Compact.—See novelties.	
987 — Extra Choice Mixed.....	10
988 — Fine Mixed.....	5
989 — New Mammoth Strain.—This distinct and superb class of Verbenas, also offered as "Grandiflora," is a remarkable improvement on the older varieties. It produces flowers of an enormous size, the florets being fully one inch in diameter, with clearly defined margins and white eyes. Our illustration which is about one-half natural size, represents extremely well the size, fine form, and delicate shading of this magnificent flower. Our seed is saved from the finest flowers only, and will not fail to produce the best results. Per pkt. 25c.; 5 pkts. \$1.00.	

NEW MAMMOTH VERBENA.

Our illustration which is about one-half natural size, represents extremely well the size, fine form, and delicate shading of this magnificent flower. Our seed is saved from the finest flowers only, and will not fail to produce the best results. Per pkt. 25c.; 5 pkts. \$1.00.

STOCKS.

GERMAN TEN WEEKS (GILLYFLOWER).

These are among the best and most popular of the garden favorites. In brilliancy of color and general effect they are unsurpassed. They are equally fine for bedding, borders, massing or for pot culture. The Ten Weeks Stocks will bloom about 10 to 12 weeks after being sown. For early flowering, sow in the house in February or March, and plant in open ground in May, when danger of frost is over. Our seed is saved from pot-grown plants, and is sure to give about 80 per cent of double flowers. 9 to 18 in. high. H. H. A.

Dwarf German Ten Week Stocks.

1060 Pure White.....	15	1063 Crimson.....	15
1061 Brilliant Rose.....	15	1064 Purple.....	15
1062 Light Blue.....	15	1065 Canary Yellow.....	15
1066 Imported Collection of 12 distinct colors.....	75		
1067 Imported Collection of 6 distinct colors.....	40		
1068 Wallflower-leaved.—Choice mixed.....	10		
The Wallflower-leaved Stocks have quite distinct dark glossy foliage.			
1069 Large Flowering.—Choice mixed.....	10		
1070 Fine Mixed.....	5		

STOCKS, FORCING TEN WEEKS "SNOWFLAKE."

1071 This is unquestionably a very valuable acquisition, it being the earliest flowering white Ten Weeks Stock in cultivation, resembling in habit the Dwarf Pyramidal race. It produces a vigorous main spike of extremely large and double snow-white flowers, which very effectively contrast with the glossy, dark-green leaves. It is very good for forcing, and furnishes white flowers at a time when they are scarce. Packet, 25 cents.

Large Flowering Dwarf Pyramidal Bouquet.

This variety has compact flower spikes, and throws out many side shoots, excellent for pots.

1072 White.....	15	1075 Light Blue.....	15
1073 Rose.....	15	1076 Dark Blue.....	15
1074 Crimson.....	15	1077 Many Colors.—Mixed.....	10

New Giant Perfection.

This sort produces plants 2½ feet high, with long flower spikes of extra double handsome flowers, and is extremely effective in beds and borders.

1078 Choicest Mixed.....	10
1079 Collection of 6 distinct colors.....	60

Intermediate, or Autumnal.

These are prized on account of their flowering late in Autumn or early in Spring. The seeds should be sown in July.

1080 Finest Mixed.....	10
1081 Collection of 6 distinct colors.....	40

Emperor, or Brompton.

These make very bushy and branching plants, with an abundance of flowers. Sow in July or August. Will last several years when protected.

1082 Many Colors.—In finest mixture.....	10

NEW PERPETUAL TEN WEEK STOCK, WHITE PERFECTION.

1083 This splendid variety grows about 18 inches high, is of a very branching habit, and almost a perpetual bloomer. If sown early it will begin blooming by the middle of June and will continue until November, when all the other stocks are through flowering. The flowers are of the purest white, very large, of perfect form, and all borne on stems about three inches long; which latter feature renders them valuable for bouquets, etc., and the flowers are replaced as they are cut. PER PACKET 25c.

CARNATION STRIPED ZINNIAS.

VINCA (PERIWINKLE).

Pretty greenhouse plants with dark green glossy leaves, sometimes variegated, on a trailing stem; handsome salver-shaped flowers. 2 feet.

- 1100 V. Rosea.—Rose..... 10
1101 — Flore Alba.—White, with a crimson eye..... 10
1102 — Alba Pura.—Pure white..... 10

VIOLA (SWEET VIOLET).

Well known sweet scented favorites.

- 1103 V. Odorata, "The Czar."—Very large flowering blue..... 10
1104 — Blue.—Sweet Violet..... 5

VIRGINIA STOCKS (CHEIRANTHUS MARITIMUS).

- 1105 V. Maritimus.—Red; very pretty, free flowering plants for baskets, edgings and borderings, succeed in any soil. 4 in. H. H. A.

WHITLAVIA.

Pretty border plants with bell-shaped flowers. Height, 1 ft. H. A.

- 1106 W. Grandiflora.—Large blue flowers..... 5
1107 — Gloxinoides.—Blue flowers, shaped like Gloxinias..... 5

ZINNIA.

Very showy plants, of branching habit, with very fine double, brilliantly colored flowers. Height, 18 to 24 inches. H. H. A.

- 1117 — Pure White.—Plants are of dwarf and compact habit, with handsome pure white flowers..... 5
1118 — Dwarf Scarlet.—In habit like preceding, with an abundance of double fiery scarlet flowers..... 5
1119 — Golden Yellow.—Flowers large and of perfect shape, and of a clear golden yellow, hardly equalled by any other flower..... 10
1120 — Double Crimson.—Flowers very double and showy..... 5
1121 — Double Large Flowering.—A mixture of many shades and colors, the finest strain in cultivation..... 5
1122 — Mexicana Fl. Pl.—A very pretty dwarf growing variety, with golden yellow double flowers produced in great abundance..... 5
Carnation Striped Zinnias.—These are among the most useful annuals of recent introduction. The flowers are of perfect form, beautifully imbricated, very double and as finely striped as a carnation—hence the name. The strain we offer is more remarkable for boldness of stripe and strange contrast of color than any other sent out, and will produce about 75 per cent. of distinct striped flowers. Pkt., 10c.; ½ oz., 25c.

WIGANDIA.

- 1108 W. Casabonæ.—Vigorous growing plants, with very large ornamental foliage; very decorative..... 5

WALL FLOWER (GOLD LACK).

Large double flowers borne in dense spikes, deliciously fragrant, rich colors. Great favorite, especially with the Germans. H. H. A.

- 1109 W. Double Yellow..... 10 1112 — Single.—Mixed..... 10
1110 — Violet..... 10 1113 — Double Branching..... 10
1111 — Black Brown..... 10 Sorts.—Extra mixed..... 10

XERANTHEMUM.

One of the Everlastings; the flowers are very desirable for winter decoration; they ought to be gathered when on the point of opening. 2 ft. H. H. A.

- 1114 X. Plenissimum Album.—Double white..... 5
1115 — — Rubrum.—Double red..... 5

YUCCA.

- 1116 Y. Aloefolia.—A beautiful plant with showy leaves and long flower spikes of bell-shaped flowers. H. H. P..... 10

Miamisburg, O., Nov. 8, '88.—The Zinnia Grandiflora Plenissima was grand. Of the Carnation Striped Zinnia allow me to say, my collection was perfection, hard to beat. F. L. YENSEL.

List of Choice Flower Seeds in Quantity.

As Described in Preceding Pages.

As many of our customers make extensive sowings of flower seeds, and require larger quantities than are usually sold in packets we offer some of the leading sorts by weight, and we have selected such kinds as are most desirable for bedding, edgings and ornamental planting.

We will send free by mail, but cannot allow any discount or premium on flower seeds by weight. Half ounces will not be sold of such kinds as are sold for less than 50 cents per oz.

Per oz.	Per oz.
Alyssum.—Sweet.....\$ 20	Lobelia.—Erinus Speciosa..... 1 25
Antirrhinum.—Dwarf, fine mixed..... 30	Marigold.—Tall African, mixed..... 30
— Tall, fine mixed..... 35	— Dwarf French, mixed..... 30
Asters.—German Quilled, mixed..... 60	Marvel of Peru.—Mixed..... 15
— Truffaut's Perfection, choice mixed..... 3 50	Mignonette.—Sweet; per lb. 75c. 15
Dwarf sorts, mixed..... 60	— Golden Queen..... 80
— Tall sorts, mixed..... 60	— Machel; finest for pots..... 1 00
Balsam.—Double white..... 1 25	Nasturtium.—Dwarf, mixed..... 20
— Double mixed..... 75	— Tall, mixed..... 15
Canary Bird Flower..... 50	Nemophila.—Mixed..... 15
Candytuft.—White Rocket..... 25	Pansy.—Good Mixed..... 1 00
— Many colors, mixed..... 30	— Choice Mixed..... 3 50
Canna.—Fine mixed..... 15	— Vaughan's Premium, extra mixed, per ½ oz., \$1.00.
Carnation.—Extra choice double mixed..... 4 00	Petunia.—Fine mixed..... 1 00
— Vicuna Dwarf, double mixed..... 2 00	Phlox Drummondii.—Mixed..... 60
Centaurea.—Candidissima, per 1,000 seeds, 60c.	— Grandiflora, mixed..... 1 00
— Gymnocarpa..... 1 00	Poppy.—Double mixed..... 35
Cineraria.—Maritima..... 60	Portulacca.—Fine mixed..... 50
Cobaea Scandens..... 1 00	— Best double, mixed..... 5 00
Convolvulus.—Major (Morning Glory)..... 15	Pyrethrum.—Golden Feather..... 1 00
— Minor, fine mixed..... 25	Ricinus.—(Castor Oil Bean), mixed..... 15
Cypress Vine.—Mixed..... 40	Smilax.—Best for Florists..... 1 00
Dianthus.—(China Pink), mixed..... 50	Stocks.—Large flowered German ten weeks, choice mixed..... 3 00
Gourds.—Mixed..... 25	— Good mixed..... 1 50
Hollyhock.—Choice double mixed..... 2 00	Sunflower.—Double California..... 15
— Fine mixed..... 1 00	Sweet Peas.—Choice mixed, per lb., \$1.00..... 10
Larkspur.—Dwarf Rocket, mixed..... 30	Verbena.—Fine mixed..... 1 25
— Tall Rocket, mixed..... 30	— Extra choice mixed..... 3 50
	Zinnia.—Finest double mixed..... 50

• Collections of Flower Seeds. •

FREE BY MAIL ON RECEIPT OF PRICE.

Customers who prefer to leave the selection of the varieties to us, will find the following collections to contain new and extra choice varieties of all leading classes and at very low prices.

Considering the extremely low rates, we cannot possibly permit any changes, and the varieties are ALWAYS TO BE OF OUR OWN SELECTION.

NOT SUBJECT TO ANY DISCOUNT OR PREMIUM.

- Collection No. 1.—Twelve distinct varieties of hardy annuals for the flower garden. (Catalogue price, 60c.)\$ 40
Collection No. 2.—Twenty-five extra choice annuals, including Asters, double Portulacca, German Stocks, Balsams, Etc..... 1 00
Collection No. 3.—Ten different varieties of fragrant flowers..... 50
Collection No. 4.—Ten different species of climbing plants..... 60
Collection No. 5.—Ten different varieties of ornamental foliage plants for groups, Etc..... 60
Collection No. 6.—Ten different varieties for hanging baskets..... 60
Collection No. 7.—Ten different varieties of Greenhouse Plants, including such as Cineraria, Primulas, Etc..... 2 00
Collection No. 8.—Six different varieties of Everlastings..... 20
Collection No. 9.—Six different varieties of Palm Seeds..... 40
Collection No. 10.—Six separate colors of Sweet Peas..... 20
Collection No. 11.—Six different varieties for a window box..... 20
Collection No. 12.—Twelve distinct sorts of Gourds..... 40

For imported collections of Asters, Stocks, Poppies, Marvel of Peru, etc., see under respective headings in flower seed list.

OUR MIKADO COLLECTION.

10 Packets of Choice, Fresh Flower Seeds for 25c.

Contains ten beautiful varieties of easily grown annuals, in handsome colored bags with full directions for their culture, including one packet each of the following kinds.

- ASTERS, choice mixed. DOUBLE CHINA PINKS, mixed.
SWEET MIGNONETTE. MORNING GLORY.
SWEET PEAS, extra choice mixed. AFRICAN MARIGOLD.
POPPY, fine mixed. PHLOX, mixed.
SWEET ALYSSUM. NASTURTIUM, tall mixed.

We will mail the above collection at the extreme low price of 25c., 5 for \$1.00, but cannot permit any changes nor any discounts or premiums.

Customers who desire to purchase flower seeds in quantity and make their own selection, we refer to our special discounts on seeds in packets.

THE cultivation of flowers from **Bulbs and Dormant Roots** commends itself to the amateur as being far simpler than culture from seed, since they require far less care in starting, grow rapidly and soon make a good display; they **flower the first summer** and bloom and **multiply season after season**. Many kinds are perfectly hardy in the open ground, and most others need only a little care in the matter of storing through the winter. There is a tropical richness and brilliancy peculiar to bulb-making flowers which are unattainable in our hardy annuals and perennials; the flowers are large and gorgeous-hued, and the ornamental-leaved varieties are the choicest of lawn decorations; some of them are indispensable in the arrangement of every Lawn and Flower Garden, whether the handsome Climbers, the stately Cannas and tropical Caladiums, the brilliant Gladioli and Dahlias, or the fragrant Lilies or Tuberoses. We make a specialty of these Bulbs and Plants, selling two hundred thousand Tuberoses and over fifty thousand Gladioli per year.

Prices here given **include prepayment by mail**, unless otherwise noted; we urge all customers, however to order Bulbs and Plants by Express, as we can in this way send much stronger Plants and more safely packed.

◎ AMARYLLIS. ◎

Beautiful lily-shaped flowers, growing in clusters of white, pink or deepest crimson on a central stalk. The bulb is of vigorous growth, and **one of the most grateful bloomers**. Mix a soil of equal parts of loam, leaf-mold, well-rotted manure and sand; water with care, very sparingly at first, and withhold entirely during the period of rest. **Most sorts can be made to bloom twice in the season.**

ATAMASCO.—(Sec cut). Beautiful spreading upright flowers, changing in color from rosy pink to white as the flower expands. Rose or white. Each, 15c.; doz. \$1.00.

AULICA PLATYPETALA.—Large, deep crimson flowers, with pale yellow throat and spreading petals. Each, \$1.25.

Baffin.—A hybrid of Vittata. Large purplish-crimson flowers, very beautiful in shape and color. Each, \$1.25.

Crimm Ornatum.—Very large bulb, which bears upon a central flower-stalk a cluster of six to twelve large fragrant pink blossoms. This is one of the most beautiful of Amaryllis and can easily be made to bloom twice a year. Each, \$1.75.

DEFIANCE.—A new, very profuse-flowering variety, bearing five to seven carmine flowers, striped and flaked with white; remarkably strong grower, **blooming repeatedly during the season**. Extra fine strong bulbs. Each, \$1.00.

EQUESTRE.—Broad petals of a soft salmon scarlet color, throat snow white; a very handsome sort. Each, 25c.

FORMOSISSIMA.—(JACOBAN LILY). Flowers of a deep velvety crimson color, handsomely formed and very striking. A favorite Amaryllis. Each, 20c.

Johnsonii.—One of the best sorts, strong-growing and free-blooming; flowers large, crimson, striped with white. Fine strong bulbs. See cut. Each, 75c.

Oriflamine.—White with large salmon-red bands, deeper in the centre. Flowers well opened and handsome. Each, \$1.75.

TRIATEA.—(FAIRY LILY OF THE SOUTH).—Fragrant, pure white flowers; very pretty, of easy culture. Each, 10c.; doz. \$1.

Vittata.—Red Ground.—Flower crimson, with white markings. Each, 50c.

Vittata.—White Ground.—White with stripes and markings of various shades. Each, 75c.

AMARYLLIS ATAMASCO.

WE HAVE SECURED A FEW HUNDRED HYBRID AMARYLLIS SEEDS WHICH WE OFFER AT 25 CTS. PER PACKET.

◎ TUBEROUS BEGONIAS. ◎

The Tuberous-Rooted Begonias are among the handsomest of our summer-flowering bulbs. They are not grown to the extent they should be, as they require no more care than Geraniums; have as fine a range of color and will bloom continuously throughout the summer, even when Geraniums droop through lack of moisture, and fail to unfold their flowers. Planted in flower border, they rival the Geraniums with their rich and varied colors, ranging from the most delicate shades of yellow and salmon to the most striking crimson and scarlet. The tubers may be preserved in winter the same as Caladium bulbs.

Single Varieties.—All colors. Each, 25c.; doz. \$2.00.

Double Varieties.—Best mixed. Each, 50c.; doz. \$4.50.

(For Begonia Seeds, see List of Flower Seeds.)

CALLAS.

CALLA ETHIOPICA.—The old favorite pure white Calla Lily with glossy green leaves; it grows freely, requiring an abundance of water and moderate heat, and flowers freely during the winter and spring. They need a resting season, which can be given in June and July, by turning the pots on their sides without water, in a shady place.

Fine California Roots.—Each, 25c.; doz. \$2.50.

C. ALBA MACULATA.—The Spotted Calla; leaves deep green with numerous white spots, giving the plant a very ornamental appearance. Flowers pure white with black centre. Their culture is very easy and they bloom freely in the garden. Should be stored in the winter like Gladioli. Each, 50c.; 3 for \$1.00.

GLOXINIAS.

Plant in a light soil of leaf-mold, sand and good loam, keep in a moist atmosphere at a temperature of 50 to 65°, and give an occasional watering with liquid manure during the growing period. Give plenty of light but do not expose to the direct rays of the sun. Dry gradually after blooming, and store during the season of rest in cocoanut fibre or moss. Fine bulbs, 25c. each.

So, Cleveland, O., Dec. 5, '88.—The bulbs came through last night in fine condition; they are magnificent stock and all that I could desire. Thanking you for the care in filling and packing my order, I shall remember you in any future orders I may require.

John S. Healy.

Waseca, Minn., Sept. 3, '88.—I have not the time now to write you a long letter but will say as soon as I get time, I'll give you a good one. I'm going to stay with you. Saml. E. Wyman.

AMARYLLIS JOHNSONII.

BEGONIA—SINGLE TUBEROUS-ROOTED.

CUSTOMERS WHO WISH OUR FALL CATALOGUE OF IMPORTED BULBS FOR THE FLOWER GARDEN AND LAWN BEDDING, WILL PLEASE MENTION IT WHEN ORDERING SEED.

HYACINTHUS CANDICANS.

← CANNAS. →

These very handsome, tall-growing, tropical-looking plants are unrivaled for fine effects on the lawn; their large, glossy green leaves, tinted with red, purple or bronze, and their showy spikes of flowers in various shades of red and yellow produce an effect seldom equaled. They are remarkably effective when edged by a row of Caladiums. The main requisite for culture is a rich soil, deeply dug and heavily manured, and plenty of water in dry seasons. Prices include prepayment unless noted.

THREE GRAND CANNAS.

EHEMANNI.—A very handsome recent introduction, having very large, deep green leaves and immense crimson flowers, borne in full spikes on a red stalk. It is a strong grower, attaining a height of 5 to 7 feet, each stalk terminating in a long flower-stalk. Some difficulty has been experienced in keeping this variety in a dormant state. We offer this season plants from pots, well started with one or more leaves. These cannot be sent by mail. Each, 35c.; doz., \$3.50.

FLACIDA, (the Butterfly Canna).—A species of dwarf growth, 2 to 3 feet, with very large pure yellow flowers, light green foliage. This species is quite as distinct in its way as Ehemanni; when grown in the house or conservatory, the flowers remind one of certain Orchids. Blooms a month earlier than most Cannas. For bedding purposes, it is a gem. Each, 30c.; doz., \$2.50.

NOULTONI.—Very large flowers, freely produced, brilliant crimson, handsome bright green foliage. Each, 35c.

The set of above 3 varieties, 75c.

NEW AND CHOICE CANNAS.

Remarkable for their large, beautiful flowers. Selected as the finest of the recent improved varieties; imported by us direct from Mr. Crozy, the great Canna hybridizer of France.

Price prepaid, each, 35c.; doz., \$3.50.

ADOLPH WIECK.—Rich crimson, shaded orange, free bloomer.
BRILLIANT.—Purplish-green foliage; amaranth flowers. 4 feet.
BEBE.—Large canary-yellow flowers, spotted with maroon; dwarf.
BERTHAL.—Leaves green, large brick-red flowers. Height 4 feet.
B. COUSANCAT.—Leaves green, very vigorous, height 7 feet, flowers medium, very abundant; brilliant red.

EMILE LECLAIRE.—Golden-yellow, spotted crimson; orchid-like; foliage pea-green; constant bloomer.

ENFANT DE CAHORS.—Leaves purple, large carmine flowers.

FLAMBOYANT.—Dark green leaves, flowers numerous, purplish-scarlet, vigorous growth. Height, 3 feet.

FLORIFERE.—Green leaves, large flowers, yellow, spotted red. 4 ft.

F. LAPEUTE.—Leaves purplish-green, flowers carmine. 4 feet.

LION DE ST. JEAN.—Leaves green, large red flowers. 4 feet.

MULTIFLORA.—Very large red flowers. 2 to 3 feet.

MONT CENDRE.—Leaves green; beautiful large flowers, citron-yellow flamed with red at the centre. Height 4 to 5 feet.

M. FERRAND.—Purple foliage, compact spikes, maroon flowers.

ROSÉFLORA.—Bluish-green foliage, large carmine rose flowers, compact spikes. 4 feet.

REVOL MASSOT.—Garnet flowers, free-blooming, green foliage.

VESUVE.—Foliage green; grand scarlet flowers. 3 feet.

GEM COLLECTION OF NEW CANNAS.

Prepaid, \$1.50; not prepaid, \$1.25.

Adolph Wieck, Emile Leclair, Lapeute, Florifere, Enfant de Cahors and Braziliensis. See above list for description.

CANNA PLANT.

CYCLOBOTHRA FLAVA

BESSERA ELEGANS

CYCLOBOTHRA FLAVA

CYCLOBOTHRA FLAVA

CYCLOBOTHRA FLAVA

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DIELYTRA SPECTABILIS.

CHICAGO PARKS BEDDING CANNAS.

The following varieties are used largely in our Parks for massing in beds and plant groups, where a semi-tropical effect is desired; they are of a tall, rapid growth.

Price prepaid, each, 15c.; doz., \$1.40; not prepaid, doz., \$1.25.

AUGUSTE FERRIER.—Bronzy-green foliage.

BRAZILIENSIS.—Large green leaves, red flowers, tall.

DISCOLOR.—Large bronzy-red leaves.

D. O'ROURKE.—Purplish foliage, orange-red flowers.

M. VAILLANT.—Bronzy-red foliage, orange flowers.

PREMIERES DE NICE.—Foliage green, flowers golden-yellow; constant bloomer.

THREE MEXICAN GEMS.

The three following varieties are of easy culture as a Gladiolus and most free of flower. Treat same as Gladiolus; plant out in good garden soil soon as warm enough, lift in the fall and store in dry, warm place over winter. They are most effective in masses and charming together.

Bessera Elegans.—Small bulbs, long narrow grass-like leaves, and slender flower stalks, 1 foot high, carrying a loose umbel of flowers 1½ inches across, each forming a shallow scarlet bell, marked with white lines; tuft of stamens with bright blue anthers. It is a wonderfully free bloomer, throwing up spike after spike and flowering until frost. Each, 15c.; doz., \$1.25.

Cyclobothra Flava.—Flowers golden-yellow, with fine black dots in the inside of the petals, and beautifully bell-shaped. Resembles Bessera in habit and foliage. Each, 15c.; ten for \$1.00.

MILLA BIFLORA.—One of the finest bulbs recently introduced; flowers pure waxy-white, very fragrant, borne on stalks about 18 inches high; the petals are very thick and firm, and flowers last well in winter. Like the Bessera and Cyclobothra, it blooms with wonderful freedom. Each, 15c.; 10 for \$1.00.

DIELYTRA SPECTABILIS, BLEEDING HEART.

These pretty spring bloomers, with their graceful drooping sprays of heart-shaped pink and white flowers, are very ornamental, and bloom freely early in the season. The plants being hardy, increase in size and bloom from year to year, and should have a place in every garden. See cut above. Each, 15c.; doz., \$1.50.

HYACINTHUS CANDICANS.

A very striking and beautiful plant. It is a strong grower and quite hardy; shoots upward a stem three or four feet high, which bears quantities of drooping, ivory-white, bell-shaped flowers of delicate fragrance. It is a great favorite in England, where they plant it in groups of 3 to 5 among Gladioli, Lilies or other tall plants, with fine effect. Each, 10c.; doz., \$1.00.

LILY OF THE VALLEY.

No garden is complete without a few clumps of these fragrant flowers which are such universal favorites as to need no description. Their glossy foliage and spikes of graceful white bells, and their delicious perfume are equally desirable for bouquets, pot culture in the house, or borders in the garden. For planting out-doors, the clumps should be chosen; for indoor culture the selected crowns or pips. Plant as early as possible in a damp, sheltered place and leave undisturbed as long as possible; they increase rapidly and establish themselves in a short time.

Good flowering Pips, per doz., 50c.; per 100, \$2.50.

Strong Clumps, heavy, each, 50c.; doz. \$4.50.

GRAYSON LILY—(PANCRA TIUM ROTATUM.)

An Amaryllis-like bulb, native of Florida, bearing pure white fragrant flowers of curious form; hardy in the Southern States. Each, 25c.

LILY OF THE VALLEY.

SINGLE DAHLIAS.

DOUBLE DAHLIA.

CACTUS DAHLIA.

DAHLIAS.

CACTUS DAHLIAS.

This new class is named from their resemblance to Cactus flowers and are among the showiest.

CONSTANCE.—Ivory white; charming flower for bouquets.
LYNDHURST.—Deep scarlet, shaded maroon.
EMPRESS OF INDIA.—Deep crimson, shaded maroon; grand sort.
WM. PEARCE.—Rich yellow, very floriferous.
MRS. HAWKINS.—Yellow, tinged with red.

Pot Plants, prepaid, each, 20c.; doz., \$1.50.

SINGLE DAHLIAS.

These exquisite new Dahlias are most popular for wearing and for bouquets.
BRIDAL WREATH.—Creamy white; fine.

CANARY.—Pale yellow, fine form.
CHRISTINE.—Pink, well rounded petals, charming color.
PARAGON.—Rich maroon.
SCOTCH LASSIE.—Buff, striped rose.

Pot Plants, prepaid, each, 20c.; doz., \$1.50.

LARGE DRY DAHLIA ROOTS.

Large dry roots can be furnished of the following sorts only; in making a list of sorts it is well to mention a second choice in case we are out of any variety.

Price, not prepaid, each, 25c.; doz., \$2.50.
If wanted by mail add 30c. per doz., for postage.

DOM PEDRO.—Scarlet and white.
YELLOW PRINCE.—Yellow.
ADA TIFFIN.—Buff, tipped white.
QUEEN OF SUMMER.—Crimson.
BLACK KNIGHT.—Very dark.
GEM.—Red. | CONSTANCE.—White.
AMAZON.—Yellow, striped red.
SOLIMAN.—Yellow.
PURPLE QUEEN.—Purple.
ALBA FLORIBUNDA.—Pompon white.
DR. STEIN.—Maroon.
DEMETRIUS.—Buff.
YELLOW BEAUTY.—Yellow.

—• DAHLIA SEED. —•

It is now a well known fact that Dahlia seed if sown early and given proper treatment, will produce flowering plants the first season, many seedlings thus produced being of most beautiful shades.

DOUBLE DAHLIA.—Extra choice, mixed. Per pkt., 15c.
SINGLE DAHLIA.—Finest mixed. Per pkt., 10c.

DAHLIA GRACILIS.—The most handsome Dahlia in cultivation; flowers striped, mottled, streaked and flaked in the most grotesque and pleasing manner. Pkt., 15c.; 2 for 25c.

Directions for culture are to be found on each bag.

CALADIUMS.

One of the most effective plants in cultivation for the flower border or for planting out upon the lawn, its large, handsome leaves often growing three feet long and twenty inches wide. It will grow in any good garden soil, and is of easiest culture. Bulbs can be stored in dry sand in a warm place over winter, and will increase in size from year to year.

ESCULENTUM (Elephant's Ears).—Immense leaves of a fine, rich green; very showy. First size bulbs, 2½ to 3 inches in diameter, each, 35c.; per doz., \$3.00. Second size, 1½ to 2 inches, each, 15c.; per doz., \$1.50. Extra large bulbs, 50c.

BATAVIENSIS.—Very similar to the Esculentum, but more upright in growth, dark green foliage with red stems. Each, 25c.; doz., \$2.50. Extra large bulbs, each 50c.; doz., \$5.00.

THE long neglected Dahlia has been restored to popularity, the demand last season exceeding the supply. Their colors are most brilliant and their growth vigorous and rapid. The new Single and Cactus Dahlias are great improvements on the old sorts. We ask every lover of exquisite flowers to try at least one of these, and take our promise of the greatest satisfaction.

Price, except where noted, each, 20c.; 3 for 50c.; doz., \$1.50. All prepaid except noted, large roots, for those add 30c. per doz. for postage.

—• TWO GRAND NEW DAHLIAS. —•

WHITE DOVE.—Extra fine double flower, pure white with perfect center; petals beautifully toothed; one of the finest of all white Dahlias. The cut flowers of this variety are more sought for by florists than any other. Each, 35c.

W. T. ABERY.—Broad flat petals of purest snowy white, the margin heavily banded with scarlet; a lovely flower and a perfect gem for cutting. The plant is of free growth and profuse bloom. Each, 35c.

The two varieties for 60c.

DOUBLE LARGE FLOWERING.

Our collection embraces a perfect assortment of colors and fine vigorous varieties.

ADA TIFFIN.—Buff, tipped white.
BICOLOR.—Yellow, tipped white.
CAMELLIA FLORA.—Dwarf habit, pure white, extra fine.

CHRIS. RIDLEY.—Deep maroon, profuse bloomer; vigorous habit.

COSSACK.—Scarlet.
DAWN.—Dwarf, creamy white, tipped rose.

DR. SCHWEBB.—Scarlet, brilliant.

DOM PEDRO.—Scarlet and white.

GOLDEN BEDDER.—Dwarf, orange yellow.

GLOWING COAL.—Deep scarlet.

GUIDING STAR.—Pure white, petals toothed, grand.

HIGH SHERIFF.—Maroon, very dark.

LUCY FAWCETT.—Yellow, striped and spotted carmine.

MISS DODD.—Yellow. | PLUTON.—Rich yellow, fine.

PRINCESS MATILDA.—A grand white variety, dwarf, bushy habit, free blooming; lovely for cutting.

PURPLE QUEEN.—Purple. | RED HEAD.—Red.

SNOW CLOUD.—White, of dwarf growth and large flowers, splendid for cutting and florists' use.

SUNBEAM.—Terra cotta, carmine tinged centre.

VESTA.—White, large flower.

WACHT AM RHEIN.—Maroon.

YELLOW BEAUTY.—Yellow, pure.

Fine Pot Plants, ready in April, May and June; by mail prepaid, each, 20c.; doz., \$1.50.

DOUBLE BOUQUET OR POMPON.

BUTTERFLY.—Orange, tipped scarlet.

COLIBRI.—Scarlet, bright. | IDA FISCHER.—Pure white.

LURLINE.—Canary yellow, beautiful.

PEARL D'OR.—Lake red, tipped yellow.

THEO. HEYMANN.—Dark red.

LITTLE EVA.—White and pink; favorite sort.

Pot plants in April, May and June, prepaid, each, 20c.; doz., \$1.50.

DAHLIA W. T. ABERY.

CALADIUM ESCULENTUM.

Vaughan's Gladioli

WE cannot emphasize too strongly the desirability of this magnificent flower. If the demand but half equaled the real value of this class of bulbs for the flower garden, our annual shipments would be ten times greater than they now are. Their adaptability for garden beds and the ease with which they can be brought into flower at any time during the summer months; their rapid increase while flowering and their permanent value as dry bulbs claim the highest consideration. Nearly all other bulbs lose their value with the first flowering; many of our finest plants are worthless with the end of the summer, and few of either bulbs or plants can be increased and easily cared for like the Gladiolus. If we add then to the above their just claims as flowering plants no further argument is needed.

Their immense spikes of gorgeous bloom comprise in color all the shades from white to deepest scarlet, purple and yellow, with blotches and markings of charmingly contrasted shades. They are unequaled for vase decoration, as the spikes may be cut when partially in bloom and will last for a week or more, the buds expanding into perfect blossoms as the older florets fade. Take up in the fall and store in a dry cellar or other cool place, well protected from frost. The varieties we offer below are selected especially for their fine coloring and distinctness of marking and will prove among the most satisfactory of the class.

For complete list of varieties send for special descriptive catalogue.

Prices include prepayment by mail except where noted.

MIXED GLADIOLI.

For a display of brilliant coloring and showy bloom, we recommend the following mixtures as unexcelled, and containing an excellent choice and complete variety of colors.

Dozen prices postpaid; 50 rates at purchaser's expense.

SEPARATE COLORS.

	Doz.	50
RED of various shades.....	\$.35	\$1.25
LIGHT and WHITE shades.....	.75	1.75
PINK of various shades.....	.60	1.50
STRIPED & variegated shades.....	.60	1.50
YELLOW shades.....	.60	2.00
SALMON shades, each 10c.....	1.00	

ALL COLORS.

	Doz.	50
VAUGHAN'S Fine mixed.....	.30	\$1.00
VAUGHAN'S Extra mixed.....	.40	1.50
*VAUGHAN'S choice seedlings.....	.75	2.50

*These Seedlings are raised from seed from the finest named varieties, and many of them equal their parents in all respects, giving a large percentage of strikingly beautiful flowers.

LEMOINE SEEDLINGS fine mixed.—An excellent grade of this new strain, each, 6c; doz., 60c.
LEMOINE SEEDLINGS extra fine mixed.—Raised from seed from the finest sorts and selected for their brilliancy and distinctness. Each, 10c; doz., \$1.00.
SMALL LEMOINE BULBETS.—Mixed from named sorts; 75 per cent. will bloom the first season. Each, 5c; doz., 50c.

NAMED GLADIOLI.

AFRICAIN.—Very peculiar and distinct sort, slaty brown on a scarlet ground, streaked scarlet and pure white, conspicuous white blotch.	30
Astree.—White with violet blotch; throat suffused lilac.....	25
AUORE.—Bright salmon rose, marked orange, carmine and lilac; blotch cherry rose, streaked violet; a grand new variety.....	60
BARONESS BURDETT-COUTTS.—Delicate lilac, tinged with rose, flamed rosy purple; spike very long and flowers unusually large.....	60
CERVANTES.—Flowers very large, bright rose color, tinted lilac and marked with carmine; pure white band on each petal.....	25
DIAMOND.—Early flowering; fleshy white, of remarkable freshness; throat ivory-white, blotched and streaked carmine. 3 for 50c.....	20
HESPERIDE.—Pure white ground, flaked and blotched rosy salmon.....	30
LE VESUVE.—Intense fiery red; very rich.....	30
PEPITA.—Bright golden yellow flowers; very free blooming.....	35
RICHARD COEUR DE LION.—Fine large spike; flowers bright crimson, flamed and edged garnet; lower petals spotted golden yellow..	30
SHAKESPEARE.—Large, white tinted with carmine-rose, rosy blotch	25
SAUNDERSONI.—Flowers of rich orange-scarlet, the petals having a remarkably soft appearance, glistening and sparkling like crystal.....	50

THE 12 ABOVE FOR \$3.00.

LEMOINE SORTS.

This brilliant and remarkable class of HALF-HARDY Gladioli is known for convenience as Lemoine's Hybrids. They are unequaled for their vivid and rich orchid-like coloring, which reaches its climax in the blotch, the typical and remarkable feature of the variety.

ANDRE CHENIER.—Salmon, lower petals blotched velvety black, bordered with chrome yellow.....	75
ENGESSERI.—Very deep pink, lower petals blotched maroon	15
GUERRIER DE DUMAST.—Flowers flame color, lower petals marked with velvety purple.....	35
LAFAYETTE.—Very large flowers; yellowish salmon, large crimson blotches on lower petals.....	20
MARIE LEMOINE.—Fine open flowers; cream, flushed salmon lilac; lower petals marked violet and yellow.....	25
MEISSONIER.—Large flowers; carmine rose, lower petals spotted bright carmine, shaded yellow.....	35
TALMA.—Pale lilac; lower divisions violet brown.....	50

THE 7 FOR \$1.90.

SMALL LEMOINE BULBETS.

COLLECTIONS.

Our offers of collections of assorted named Gladioli have in previous years met with such large demand and given such universal satisfaction that this season we have increased them in number and completeness, including many of the gems of our magnificent assortment. All are FIRST SIZE BULBS, not the small mailing bulbs sent out by some houses in collections. We have also attached prices at which we can supply single bulbs.

No premium with these special collections.

NO. 1. 12 FINE NAMED VARIETIES \$1.00. Each.

Angele, large showy white flowers.....	10
Elegans, cherry, tinged brilliant orange; large white blotch.....	15
Ida, large, white tinted rose; lower petals light yellow.....	15
Isaac Buchanan, very fine clear yellow.....	10
James Carter, fine red, large pure white blotch.....	10
Le Poussin, light red, white blotch.....	15
Mme. Monneret, delicate rose, striped white, carmine blotch.....	10
Napoleon III, bright scarlet, center of petals striped white.....	10
Cleopatra, soft lilac, shaded violet, purple blotch.....	15
Bernard de Jussieu, violet, shaded cherry, purple blotch.....	10
Ceres, pure white, blotched with purplish rose.....	10

NO. 2. 12 GRAND NAMED SORTS \$2.00.

Arsinoe, fine satin rose, flamed with bright carmine.....	15
Astree, white with violet blotch; throat suffused lilac.....	25
Ciceron, large open flowers, fine rose, white throat.....	20
Conquete, large cherry flower, shaded rose, white blotch.....	25
Esmeralda, ivory white marked carmine, lemon yellow blotch.....	20
Lamarck, long spike, cherry and orange; large white stain.....	20
Mme. de Vetry, white with purplish carmine blotch.....	20
Meteor, very brilliant dark red, pure white blotch, distinct..	20
Pactole, grand yellow, tinged rose, darker blotch.....	20
Phebus, brilliant red, large white blotch.....	20
Schiller, sulphur yellow, with large carmine blotch.....	20
Van Dyck, crimson amaranth, striped white.....	15

NO. 3. NOVELTY COLLECTION \$3.00.

9 Grand Named Lemoine Gladioli, 3 Rare Hardy Sorts.

THE ABOVE ENTIRE LIST OF 55 NAMED GLADIOLI POSTPAID FOR \$9 50.

"THE CARELESS EYE CAN FIND NO GRACE,
NO BEAUTY IN THE SCALY FOLDS,
NOR SEE WITHIN THE DARK EMBRACE
WHAT LATENT LOVELINESS IT HOLDS."

Prices quoted below include prepayment by mail.

Auratum.—(The gold-banded Lily of Japan).—Immense white flowers, each petal marked with a wide gold band and spotted with maroon; very free-blooming. It is considered by many the finest of them all. See cut. Fine bulbs, each, 30c., doz., \$3.00; extra large bulbs, each, 50c., doz., \$5.00.

Auratum Rubrum Vittatum.—A rare species recently imported from Japan; very large white flowers with crimson spots and a crimson band on each petal. Immense bulbs, each, \$1.00.

Batemani.—Flowers rich apricot color. Each, 25c.; doz., \$2.50.

Brownii.—A very large, handsome variety; flower a spreading trumpet, purple outside, cream-white inside, with stamens of rich chocolate color; very fine. Each, \$1.25.

CANADENSE.—This pretty Lily is one of our hardy native sorts, and bears a graceful stem of drooping, bell-shaped yellow and red flowers. Each, 10c.; doz., \$1.00.

Candidum.—The pure white garden or Easter Lily; flowers snow white with heavy yellow stamens; hardy and free-blooming, bearing 5 to 20 blossoms. Plant early and leave them undisturbed. Each, 12c.; doz., \$1.25.

Chalcedonicum.—Blossoms of intensely brilliant scarlet. Each, 50c.

ELEGANS, or Thunbergianum.—Early flowering, ranging in height from four inches to four feet; flowers cup-shaped, borne upright, and of a great variety of colors. They are very effective planted either in lines or clumps, and include many showy sorts. Mixed. Each, 15c.; doz., \$1.25.

Elegans, Alice Wilson.—Bright straw color, slightly spotted with black; very rare; desirable. Each, \$1.00.

Excelsum.—This stately and beautiful Lily is a favorite wherever known; it grows from 5 to 6 feet high and bears 6 to 12 fragrant nodding lilies, of a delicate light buff color. Each, 50c.

HARRISII. The Bermuda Easter Lily.—Immense pure white trumpets with a very delicate pervading fragrance; remarkable for its earliness and extreme profusion of bloom, flowering much earlier than any other variety known and with such freedom that even the smallest bulbs surprise you with their flowers. They are the finest Lilies for house culture and are largely in use for winter forcing. Protect well in winter. Good bulbs, each, 20c.; doz., \$1.75.

Krameri.—Beautiful spreading flowers, varying in shade from delicate pink to deep rose without spots, and of exquisite fragrance. It is a rarely beautiful variety, growing 3 to 4 feet high and blooming in July. Each, 30c.

LONGIFLORUM.—An old favorite. A variety bearing in clusters beautiful snow-white trumpet-shaped flowers of rare fragrance; fine for forcing and house culture. Each, 15c.; doz., \$1.50.

Martagon. Turk's Cap.—Drooping lilies with deeply recurved petals, spotted purple. Mixed, each, 15c.

LILIUM HARRISII.

LILIUM AURATUM.

LILIUM CANDIDUM.

NO garden flower has so many distinct and beautiful varieties as the Lily, and most sorts are sufficiently hardy to be grown in our gardens with a little extra protection in the winter. Their elegant habit of growth and beauty and fragrance of flower render them unequaled in borders and clumps, or among shrubbery. The soil is most favorable if well mixed with peat or leaf-mold and sand; plant six or eight inches deep and about twelve inches apart; cover at the approach of winter with dry leaves or manure, three or four inches deep. Plant as early in the season as possible, and put them in earth as soon as received. When planted outside, it is well to leave them undisturbed for a number of years, as they bloom best when thoroughly established.

Monadelphum.—Rich citron, spotted black; a fine Lily. Each, 50c.
Pardalium.—A rich yellow and scarlet flower, spotted with purple; one of the Canadense class. Each, 25c.

Pulchellum.—Blossoms with Tenuifolium; flowers borne upright, bright crimson, spotted black, spreading their petals nearly at right angles. Hardy as the Tiger Lily and very showy. Each, 30c.

Parryi.—A pretty California Lily; light yellow, spotted with purplish chocolate; very fragrant. A distinct sort. Each, 40c.

Superbum.—The finest of the native lilies; flowers bright orange-red thickly spotted with purple; remarkable for immense height, (often 8 ft.), and profusion of bloom, a strong plant bearing 20 to 30 flowers. Each, 10c.; doz., \$1.00.

TENUIFOLIUM.—A native of Siberia, one of the very hardiest lilies; flowers vivid scarlet with petals reflexed as shown in the engraving; very showy and free-flowering, blooming early in the spring. It is very easy of cultivation, requiring only a well-drained, sandy soil. Each, 30c.; 4 for \$1.00.

Tigrinum. (Single Tiger Lily).—Very hardy native Lily; orange-red, spotted with purplish black; is extremely pretty and bears 8 to 20 flowers when well established. Each, 15c.; doz., \$1.50.

Tigrinum Flore Pleno. (Double Tiger Lily).—Each, 15c.; doz., \$1.50.

Wallacei.—Clear buff flowers, spotted with black; a very distinct and handsome Japanese variety; free-flowering; a strong bulb often bearing several flower-stalks. Each, 25c.; doz., \$2.00.

SPECIOSUM SORTS.

As a whole, the most desirable section of all Lilies for general cultivation, the varieties are distinct, graceful, beautiful and free-blooming. They are hardy, needing very little protection, and will grow and flower without any special treatment.

Album.—Pure white and very fragrant. Each, 35c.; doz., \$3.50.

Monstrosum Album.—An interesting and distinct variety, with a broad, flat stem; pure white flowers; very floriferous. Each, 20c.; doz., \$2.00.

Album Præcox.—A lovely, pure white Lily, with petals reflexed and slightly tinted with pink at the tips; center of the flower is embellished with a fine long fringe. It is perfectly hardy and altogether the finest of the white varieties. Each, 40c.; doz., \$4.50.

Rubrum.—Rose and white, spotted with crimson. Each, 15c.; doz., \$1.50.

Monstrosum Rubrum.—Distinct varieties, with broad, flat stems and of color similar to the preceding; free-blooming. Each, 20c.; doz., \$2.00.

Wallace's Notes on Lilies.—An interesting and valuable book on Lilies, indispensable to bulb growers; illustrated. Cloth (215 pages), \$2.25.

Chicago.—I raised sixty-two (62) flowers and buds from one Bulb *Lilium Auratum* which you sold me.
J. Gibson, Gardener for W. H. Rand, Esq.

SWEETEST
FLOWER
FOR SCENT
THAT
BLOOMS!

VAUGHAN'S TUBEROSE
SALES : BULBS
200,000 PER YEAR

TUBEROSE BULBS.

AT this writing (December 15th,) we are storing for the winter that part of our Tuberose crop just cured, which is to be used for our spring sales; these, with our wholesale and Foreign orders, amount this season to about 300,000 bulbs. We are, therefore, able to supply our retail customers with the finest bulbs that can be selected. Try them. Very low rates on large lots. The growing plant is fond of light and heat and must have full sunlight when bedded, and plenty of water when it begins to grow freely, but not too much water when first started, and should not be planted outside before April 1st. The bulbs may be planted at intervals of a week or so to give a succession of bloom, in which case the late plants may be brought in doors (if in pots sunk in ground) to flower in the house in autumn.

TALL DOUBLE.—The stem $3\frac{1}{2}$ to 5 feet in height; strong and very free-blooming. Prepaid, each, 8c.; doz., 75c.; not prepaid, each, 6c.; doz., 60c.; per 100, \$2.75.

DWARF PEARL, TRUE.—None better. This now well-known sort produces larger and very double flowers on shorter stems than the common variety, growing from $2\frac{1}{4}$ to 3 feet in height. Prepaid, each 8c.; doz., 75c.; not prepaid, each, 6c.; doz., 60c., 100, \$3.50.

VARIEGATED LEAVED.—This is an early single kind, with striped foliage; flowers cannot be compared with the double ones. Prepaid, each, 15c.; doz., \$1.25.

SINGLE.—Sometimes called Orange Flowered. Bloom very early, and are exceedingly graceful and pretty. Prepaid, each, 8c.; doz., 60c.

SECOND SIZE, Tall Double, or Dwarf Pearl.—Blooming bulbs, each, 6c.; doz., 50c.; per 100, \$2.50.

TRITOMA.

PAEONIAS.

CHINENSIS.—These showy, old fashioned plants, with their immense full double, satiny flowers in lovely shades of red, pink and white, are of such hardy and vigorous growth as to withstand our severe northern winters. They are very handsome and compact in growth, and bloom freely in early summer. Colors separate, red, pink, or white. Each, 25c.; doz., \$2.50.

Officinalis.—Bears immense purple or deep crimson flowers; very attractive and free-blooming. Each, 40c.; 3 for \$1.00.

Tenuifolia, Fl. Pl.—A new distinct Paeonia, with fine, fern-like foliage and handsome full double flowers of a rich crimson color. Each, 50c.

TRITOMA UVARIA.

Often called the "Torch Lily" or "Red Hot Poker" on account of its dense spikes of flame-colored flowers. It blooms in August and is very striking when planted singly on the lawn. Does well planted near water, or in any rich soil. Each, 20c.; doz., \$2.00.

MONTBRETIAS.

A very pretty Gladiolus-like class of bulbs, free-blooming and easy of cultivation. The sorts we offer succeed well in any sunny spot in fairly rich, well-drained sandy soil; must be taken up in the fall and wintered like a Gladiolus.

Montbretia Crocosmiflora.—Large flowers, arranged on spikes twelve to twenty-four inches long; bright orange, dotted purple. Each, 10c.; six for 50c.

Montbretia Pottsil.—Flowers funnel-shaped, bright orange red, with spotted throat. Each, 10c., dozen, \$1.00.

RESURRECTION PLANT.

A curious plant, a native of the South, which, if taken up and allowed to dry, becomes dormant, but possesses the remarkable power of becoming fresh and green, often in a single night, after being given water. Each, 15c.; 2 for 25c.

WHITE WATER LILY.

(NYPHAEAE ODORATA.)

Perfectly hardy and requiring no cultivation; plant in a sluggish stream, or in a tub, 18 inches to 2 feet deep, cover the root with about two inches of rich loam and fill with water; store the tub in a cellar over winter to prevent freezing. Strong roots, prepaid, each, 35c.; not prepaid, each, 25c.; doz., \$2.25.

IRIS (FLEUR-DE-LIS.)

One of the most satisfactory of flowers for garden culture, many varieties also adapted for forcing.

Iris Germanica.—Very hardy sorts and one of the most brilliant types of Iris; flowers large, richly marked with violet, purple and bronze. Each, 25c.; doz., \$2.25.

Iris Kaempferi.—The beautiful Japan Iris, distinct, large and handsome. Mixed varieties, good assortment. Each, 25c.; doz. \$2.00. Double white, each, 25c.; doz., \$2.00.

Susiana or Mourning Bride.—A very large early flowering Iris; color grayish blue, finely netted and lined with deepest chocolate and black. Each, 15c.; doz., \$1.50.

PAEONIAS.

• TIGRIDIAS. •

The Tigridia, or Tiger Flower, as it is often called, reminds one much of the Tulip in the brilliancy of its gold and scarlet coloring. Its culture is similar to that of the Gladiolus, and for summer flowering in the garden, the bulbs should be planted out in the spring in a sheltered position with southern exposure; prefers a light, sandy soil. It is one of the easiest plants in the world to cultivate and is sure to flower abundantly in any warm situation. It is a pretty plant for pot culture, and the novelty in this class, Grandiflora Alba has attracted much attention at horticultural shows recently.

Conchiflora.—Yellow and orange with dark spots. Each, 10c.; doz., 75c.

Pavonia.—Red, tinted and spotted with yellow. Each, 10c.; doz., 75c.

Grandiflora Alba.—Flowers large, pearly white; marked at their base with reddish brown spots on a yellowish ground; a greatly admired variety. Each, 15c.; doz., \$1.00.

The three above for 30c

Hinsdale, Ill., Nov. 31st, '88.—The Seed and Bulbs I have had from you in the past three or four years have been very good indeed, especially were the Bulbs I forced last winter, the best I ever saw any where. I got them from you and they excited the admiration of everybody who saw them.
Ernest Jensen.

TIGRIDIAS.

CLEMATIS
JACKMANI.

MOON FLOWERS.

Most charming and popular summer blooming climbers. It is quite safe to say that in all the list of summer vines none equal moon-flowers for rapid growth, quantity of flowers and showy effects. For covering walls, porches or trellises, particularly the latter when over paths, their beautiful moon-like flowers are seen to great advantage. A good warm rich soil with a sunny exposure suits Moonvines, which should not be planted sooner than are tomatoes in the garden; any-time thereafter for a month. The demand sometimes exceeds the supply; early orders—to be sent later—are best as plants are thus reserved for you.

Ipomoea Noctiflora, White Moon-flower, hundreds of thousands sold yearly flowers 6 inches in diameter, pure white, opening at night.

— **Leeri**.—Flowers deep azure blue, 6 inches in diameter; a charming contrast to the preceding, a free bloomer.

— **Palmata**.—Purplish rose; flowers remain open some hours after the sun shines. This variety has tuberous roots; must be taken up and wintered like a dahlia; the roots improve in size and profusion of bloom with age.

Each, postpaid, 20c.; the three for 50c.

Tacoma, W. T., Dec. 4, '88.—Let me say that the Gladioli Bulbs I ordered of you by telegraph last summer were very beautiful, as fine as some I paid \$12.00 per 100 for. MRS. A. R. MANN.

MOON FLOWER.

CLEMATIS.

The most beautiful class of flowering climbers.

various kinds they may be had continually in bloom for four months. They must have a sunny location and good culture; dig the ground deep, make it rich and water whenever needed. Prices include prepayment unless noted.

JACKMANI.—This variety, with its strong, healthy growth, hardy nature and its rich, deep velvety purple flowers, is the most satisfactory of its class. It is already one of the most popular climbers, as it is almost perfectly hardy and blooms with astonishing profusion. It flowers from July to November on shoots of the present season, and should be pruned early in the Spring. Strong 2 yr. plants, each, 60c.; not prepaid, 50c.; doz., \$4.50.

Jackmani Alba.—In Clematis the most valued addition in recent years. Its being nearly a pure white, and of strong growth and constitution, will at once stamp it as an invaluable plant. Long branches, full of flower; has been continually shown during the last three years, so there is no doubt as to its genuine value. Each \$1.00.

Coccinea.—A very handsome, hardy climber, bearing bell-shaped flowers of a bright coral red color; blooms with wonderful profusion from June until frost. Good crowns, each, 30c.

Crispa.—A very beautiful species, bearing an abundance of pretty bell-shaped fragrant lavender flowers with white centres. Blooms from June until frost. Each, 25c.

FLAMMULA.—Vigorous growing sort with small white, sweet scented flowers and ornamental foliage; the flower-like winged seeds are also very attractive in the autumn. Fine plants, each, 25c.

LUCIE LEMOINE.—Large double white well-formed flowers; very showy and one of the finest Clematis. Prune when flowering is over. Strong plants, each, 75c.

VITICELLA.—Very hardy Clematis, blue or purple; remarkably vigorous growing and free blooming sort; flowers from June to September. Each, 25c.

One each above 7 Clematis prepaid for \$2.50.

JAPANESE HOP (HUMULUS JAPONICUS.)

Very hardy, withstanding heat, drouth and insects remarkably; one of the most rapid growing ornamental climbers known; foliage resembles the common hop but is denser. Invaluable for any position where a thick screen of foliage is needed. Strong roots, each 20c.; 3 for 50c.

WISTARIA.

A magnificent climber, with handsome luxuriant foliage, bearing long racemes of fragrant flowers, which cover the entire plant during the blooming season in May and June. It grows rapidly when well-established, and will reach almost any height.

Wistaria Sinensis.—Deep lilac flowers, each, 25c.

— **Sinensis Alba**.—White flowers in immense clusters. Each, 35c.

APIOS TUBEROSA.

JAPANESE HOP.

AMPELOPSIS VEITCHI—(JAPAN IVY.)

This is the finest climber we know for training over walls, as it clings firmly to the smoothest surface, covering it smoothly and densely with overlapping leaves which form a perfect mat of foliage. The color is a fresh deep green in summer, and takes on in the fall the brightest autumn colors. The leaves are generally heart-shaped, and are ranged one above another as evenly as tiles on a roof. It likes a rich soil, and makes a growth of about 4 feet the first season and 6 to 8 feet each succeeding year, requires a slight protection in winter in our climate. Small plants, each, 15c.; doz., \$1.50; strong plants, each, 30c.; doz., \$3.00; extra large plants, not prepaid, each, 50c.

APIOS TUBEROSA.

A valuable hardy tuberous-rooted climber, resembling the Wistaria in vine and foliage, and having clusters of rich deep purple flowers, which have a strong, delicious violet fragrance. They grow to a great height and bloom profusely. The bulbs are perfectly hardy and should not be taken up over Winter. Each, 15c.; doz., \$1.00.

AKEBIA QUINATA.

A strong climber, best for the South, flowers in clusters, brown in color and powerfully fragrant. Each, 15c., large plants, by express, each, 35c.

ARISTOLOCHIA SIPHO.—(DUTCHMAN'S PIPE.)

A vigorous growing vine with large heart-shaped leaves and curious pipe-shaped flowers; one of the very best climbing vines known, hardy and a rapid grower, best for porches, verandas and sides of dwellings. Each, 35c.

BIGNONIA RADICANS.—(TRUMPET CREEPER.)

Fine hardy climber, bearing large trumpet-shaped flowers, rapid grower, fine foliage. Each, 20c.

CINNAMON VINE.—(DIOSCOREA BATATAS.)

A lovely climber taking its name from the peculiar fragrance of its delicate white flowers. The leaves are heart-shaped, bright glossy green; growth is very rapid, reaching about 8 feet in height; quite hardy. Good roots, each, 15c.

HONEYSUCKLES.

Famed the world over for their hardness, handsome flowers and their easy adaptability to any situation.

Belgica, Chinese sweet-scented, cream color and rose.

Flava, yellow. | **Sempervirens**, coral red. | **Halliana**, white.

Each, postpaid, 15c.; larger plants by express, 25c. each.

MADEIRA VINE.

A rapid-growing, graceful vine, with smooth, waxy dark green leaves, and dainty racemes of tiny fragrant white flowers; will grow in almost any situation. Three for 15c.; per doz., 50c.

CHRYSANTHEMUMS.

MRS. A. CARNEGIE. 1/2 NATURAL SIZE.

No flowers make so brilliant an Autumn show as these; none bloom so freely or show such an infinite variety of fanciful shapes and brilliant shades of yellows, browns, deep reds, and purest white, and their ribbon-like petals are twisted, quilled and curved in the most bizarre manner. We have selected from the immense number of good sorts and latest novelties the "Cream of the Cream," for size, beauty of color and form and freedom of bloom and there is not one among them that will fail to be a "thing of beauty" in the Fall.

The numerous Chrysanthemum Shows which have been held in November of 1887 and 1888 have done much to popularize this lovely flower, and some of the exhibits made this season by amateurs have rivaled those of the Florists. Every customer should try a few.

CULTURE.—Plant in a well enriched soil and sunny situation; for pot plants, lift them about Oct. 1, shade them for a few days, after which give them plenty of sun and water. Pinch off the terminal buds to give the plant a good bushy shape.

The accompanying engraving is a reduced copy of the beautiful colored Lithograph of a vase of these charming flowers, which we will mail postpaid for 50 cents.

NO ORDER FILLED FOR LESS THAN \$1.00.

VASE OF CHRYSANTHEMUMS.

VAUGHAN'S PREMIER COLLECTION.

THE YEAR'S BEST NOVELTIES.

This collection contains the most pronounced and distinct of all new Chrysanthemums; all have been exhibited at the various shows the past November, and have been awarded medals, first prizes, cups and certificates of merit over all others. Ready after April 1st.

THE SET OF FIVE VARIETIES, postpaid, \$4.00.

MRS. ALPHEUS HARDY.—"The most sensational novelty was the beautiful Mrs. Alpheus Hardy. Words are inadequate to convey an idea of its beauty. The flowers are pure white, medium size, incurved Japanese, the centre slightly indented, the disc entirely hidden. On the upper surface of the floret petals is what at first sight appears hoar frost or snow, which gives it a chaste, delicate and fluffy appearance." A silver medal was awarded to the introducers of this grand Chrysanthemum at the Philadelphia show in November. Price, each, \$1.00.

MRS. ANDREW CARNEGIE.—This is another noteworthy addition to the long list of Chrysanthemums; it is of immense size and of distinct character; the floret petals are broad and incurved, but stand out with remarkable freshness. It is crimson in color, lower side of petal lighter than the upper. The vase shown in our illustration above was awarded for a bloom of this variety which was nine inches in diameter. Price, each, \$2.00.

SNOWBALL.—An importation of 1888 from Japan. The flowers are of medium size, pure white and very double; season medium to late. When the flowers first show color they may be described as flat with a centre column of young growing petals which slowly lengthen and fall over until it forms a complete ball. One of the very best for commercial purposes, ready for cutting for a full month after showing color. A florist of this city cut 230 blooms at one time from one plant grown in an eight inch pot. Price, each, 50 cents.

JOHN WEBSTER.—A new Japanese variety introduced by Mr. Wood, very curious and beautiful. Long, reflexed, twisted florets on a high centre; color brownish crimson tinged with orange, thoroughly distinct; there is no other variety like it. Price, each, 50 cents.

SUNNYSIDE.—A Philadelphia novelty, as near like a pond lily bloom as a Chrysanthemum can be; flower 4 to 5 inches across, outer petals long and flat, white, faintly tinted rose, inner petals shorter, incurved and tinged with lemon, a most exquisite coloring. Price, each, \$1.00.

Hardy Perennial Phloxes.

These fine hardy plants are increasing in popularity every year, and are among the most satisfactory of plants for clumps and borders. They are of dwarf, sturdy growth, and in late summer fairly cover themselves with immense pyramidal trusses of brilliant flowers, varying in color from pure white with rosy eye to red with beautiful deeper markings. They well repay the care given them, and are sure to bloom. We offer the two following choice imported varieties:

Boule de Feu.—Rosy crimson; most charming of all varieties.

Jeanne d' Arc.—Dwarf, growing one foot high; pure white, largest flowers of any of the white sorts.

Price, each, 20c.; the two for 30c.

Mixed Varieties.—A choice collection including all colors. Strong plants from open ground. Each, 15c.; per doz., not prepaid, \$1.00.

VAUGHAN'S PRIZE COLLECTION.

A grand collection of new varieties, most valuable for general culture. The set has taken prizes wherever shown. Ready after March 15th.

Price, Postpaid, the Ten for \$2.00.

MRS. WM. HOWELLS.—Red and gold; inner petals incurved, outer petals reflexed; a very striking sort.

MRS. A. BLANC.—Magnificent large, broad, flat-petaled variety, somewhat recurved; rosy lavender, centre soft rose.

MRS. J. N. MAY.—Clear yellow, incurved broad petals.

MRS. M. J. THOMAS.—Pure white, large incurved petals, large flower.

W. W. COLES.—Resembles the grand Mrs. Wheeler, but brighter; salmon red with heavy incurved petals.

L. CANNING.—The largest and finest Chinese white ever sent out, dwarf but vigorous habit; immense flowers.

MME. DREXEL.—Bright pink and white, incurved, free blooming.

MRS. RICHARD ELLIOTT.—Full double yellow, very large.

DELIE.—Cord-like petals, gold, shaded with red; very handsome and distinct.

EMILE BELLOC.—Long petals, delicately striped rose and white, beautiful form; large flower.

VAUGHAN'S STAR COLLECTION.

Fifteen Standard Chrysanthemums for \$1.00.

Boule de Neige.—Fine white; favorite sort.

Christmas Eve.—Snow white, full; very late.

Cullingfordii.—Brilliant velvety crimson.

Diana.—Fine pure white; quilled centre, flat outer petals.

Dr. Hogg.—Large semi-double sort; crimson, yellow centre.

F. L. Harris.—Bright cinnamon red; distinct.

Mrs. C. H. Wheeler.—Grand incurved sort, petals deep red inside, pale gold outside, making a lovely contrast of color.

M. Neville.—Very early; extra fine; delicate salmon shade.

M. Norman Davis.—Carmine, shaded lilac.

Mrs. Mary Morgan.—Pink, slightly incurved, exquisite form.

Mrs. Cleveland.—Pure white, tubular petals; very distinct.

W. M. Singerly (Pyfer's).—Very large flat flowers of a rosy wine color with darker shadings; handsome.

Pietro Diaz.—Dark mahogany red, comparatively early; grand sort.

Timbale d' Argent.—Pure white, anemone-flowered; a lovely flower.

Tokio.—Cinnamon red, shaded yellow, very novel.

Pansy Plants.

To obtain the finest blossoms, the plants must be started in autumn or earliest spring months, that they may be of good size at planting time, as the flowers are at their best in size and color before exposure to summer heat. Having for many years made a specialty of Pansy Seed in finest varieties, we are prepared to supply Pansy Plants in the richest colors, largest size and most complete variety. As these plants cannot be shipped without plenty of earth, we do not offer them prepaid. They are large, with good strong roots, well packed to carry well by express. They will be ready for shipping as early as the ground is in working order. We offer as follows, packed for shipping. Per doz., 60c.; 50 for \$2 25; 100 for \$4 00.

Don't Fail to Order a Packet of International Pansy Seed.

NEW FUCHSIA, MRS. E. G. HILL.

THE engraving shown herewith was made from an spray of flowers of this grand new Fuchsia during the past summer. The flowers are of immense size, tube and sepals short, rich reddish crimson, corolla very large, very double and paper white, not flesh color, as in most varieties. Its habit is a marvel of health and vigor, foliage large, growth neat, upright, bushy and symmetrical, and it is a constant bloomer. It requires no special treatment, but will thrive and bloom with ordinary culture; does not "rest" like the Storm King, but blooms continuously. It has been called a "WHITE PHENOMENAL." Mr. Lemoine, the celebrated French horticulturist, writes: "Mrs. E. G. Hill is without a doubt the grandest Fuchsia of any color introduced for many years." Another prominent horticulturist says: "It is undeniably the most perfect and beautiful double white Fuchsia ever raised and must and will win its way into favor everywhere." Our stock of this grand novelty is genuine, has been most carefully grown and is sure to give entire satisfaction.

Price, each, 35c.; large plants, each, 50c.

NEW GIANT VERBENAS.

GRAND STRAIN SURPASSING ALL FORMER SELECTIONS.

THE noted Verbena specialist, Mr. Sproul, of Illinois, has in this new strain attained a degree of perfection heretofore unknown; trusses that measure twelve inches in circumference, bearing florets an inch and more in diameter are by no means uncommon, and the colors are most beautiful and distinct, shading from the most dazzling crimson and scarlet to the softest tints; beginning years ago with the celebrated "Beauty of Oxford," first of the mammoth type, Mr. Sproul has by many years of careful cultivation and patient selection, succeeded in producing a set including nearly all the colors possible to the Verbenas, and all of giant proportions. We confidently recommend them to our customers, and offer them in the following varieties:

MISS JAMES.—Color a delicate blush, flaked with rich pink, light center; fragrant; produces an enormous truss.

PEARL.—A giant white; trusses of this variety have measured twelve inches in circumference last season.

TRIUMPH.—A beautiful light scarlet, resembling Beauty of Oxford both in flower and foliage; a great advance in Verbenas.

GEM.—Brilliant scarlet, with the largest clear cut, pure white eye of any mammoth Verbena; unusually large, individual florets having measured 1 1/4 inches in diameter.

APPLE BLOSSOM.—Loveliest shade of light pink; enormous truss and florets.

CHALLENGE.—Most brilliant carmine pink; immense truss; larger and of deeper shade than Beauty of Oxford.

MISS COE.—Rosy amaranth with large white eye; very distinct shade and beautiful truss.

ELLESMERE.—Soft shell pink, with large, distinct white eye.

THE GIANT SET, Eight Varieties, postpaid, \$1.50; each, 25c.

NEW VERBENAS OF THE OLD TYPE.

ONWARD.—A grand new bedding Verbena; pure white with a distinct cardinal band or margin and a perfect mass of bloom! One of the most striking and showy sorts ever sent out, and as a bedding novelty, the choice among a thousand seedlings. A strong grower and most profuse bloomer. Postpaid, each, 25c.; doz., \$2.00.

GENERAL COLLECTION.—20 choice varieties, including above novelties, postpaid, \$3.00.

DAHLIA GRACILIS.

We again call attention to this valuable and tried novelty; the flowers are single, all colors more or less striped and spotted, the most profuse bloomers of all Dahlias. To those who do not care to plant the seed—see page 59—we will furnish nice young plants May 1st and after at \$1.50 per dozen by mail, prepaid; not prepaid, \$1.25 per dozen.

NEW GIANT VERBENA.

WHITE BEDDER.—Snow white, medium florets, smooth, round flower, very fragrant. It has a fine compact habit and flowers more abundantly than any other white, a decided contrast in its entire appearance to the common lank, weedy growers found in this color; a charming sort. Price, postpaid, each, 25c.; doz., \$2.00.

ASSORTED VERBENAS.—Each, 10c.; doz., 75c.; 100, \$5.00.

VERBENAS WITHOUT LABEL.—20 sorts for \$1.00.

MRS. JOHN LAING.

TWO BEST ROSES OF 1888.

MRS. JOHN LAING (HYBRID PERPETUAL). ———

This new Rose for out door planting is undoubtedly the finest new Hybrid Rose introduced for many years and entirely hardy. Its color is a beautiful soft pink; it has a most delicious fragrance and is of exquisite shape, very double and of large size; a strong grower; not subject to mildew, and, which is extremely rare in a Rose of its size, is a constant and free bloomer. A grand rose, combining all the good qualities. Awarded the Gold Medal of the National Rose Society in England. Each, 35c.; doz., \$3.25.

METEOR (HYBRID TEA). ———

Its color is a deep, clear, velvety crimson, without any purple tinge—a constant bloomer and strong grower; the blooms are of large size and when cut retain their bright color for an unusually long time. Each, 25c.; per doz., \$2.50.

THE TWO ABOVE, GOOD PLANTS, FOR 50c.

—● THE BEST 12 EVERBLOOMING ROSES. ●—

THE DOZEN FINE POT PLANTS FOR \$1.50.

La Princess Vera.—Creamy white, tinged with carmine-rose.
Marie Guillot.—Very large, white, shaded lemon; free bloomer.
Mad. Joseph Schwartz.—Creamy white, edged with carmine-rose.
Mad. Welche.—Creamy yellow, very large and sweet; free bloomer.
Souvenir de la Malmaison.—Large, rich, creamy flowers.
Sunset.—Rich, deep apricot color.
Pierre Guillot.—Bright crimson; very double; a good grower.
Catherine Mermet.—One of the best pink sorts.
The Bride.—Pure white tea rose, similar to the Mermet.
La France.—Sweetest of all, pink flowers, blooms most freely.
Countess la Barthe.—A soft, light rose, shaded amber.
Perle des Jardins.—The sale of this is as large as all other roses together; indispensable.

ROSES.

6 NEW EVERBLOOMERS.

PRINCESS SAGAN (TEA). ———

Of this season's novelties in Tea Roses, Princess Sagan is the most distinct; the blooms have the usual delicate tea fragrance, are of medium size and very freely produced; the color is an intense velvety crimson, with deeper shadings, a color heretofore only seen in the Hybrid Perpetuals, Prince Camille de Rohan, or Louis van Houtte.

REINE NATALIE DE SERVIA (TEA). ———

Flesh color, shaded yellow; buds large and double; fragrant; habit and foliage thoroughly distinct; growth strong and of moderate length. It blooms with remarkable freedom and is undoubtedly a capital summer bedder.

MADAME HOSTE (TEA). ———

White, tinted with lemon at base of petals; buds large, full double and of beautiful shape; a vigorous grower, very free bloomer and in all respects a first-class addition to our short list of white Teas.

GLOIRE DES POLYANTHAS (POLYANTHA). ———

A much more vigorous Polyantha than any previously sent out; flowers above the usual size, bright rose color; the corymbs of buds and flowers are enormous—numbering from sixty to a hundred buds and flowers to a branch.

DR. PASTEUR (HYBRID TEA). ———

Vigorous growth; handsome foliage; flowers rosy crimson, with petals recurved like those of a Camellia; a lovely variety, and very free-blooming.

MME. GEORGES BRUANT (HYBRID RUGOSA). ———

A cross between the ever-blooming roses Sombreuil and Rugosa. The growth, foliage and clusters of flowers show the Rugosa parentage, and we may confidently expect the hardiness of that variety in a large degree; the long, pointed bud, petals and fragrance indicate the Sombreuil; it is quite double, pure white and a constant bloomer—one of the most pronounced and desirable novelties of the year.

YOUR CHOICE OF THE ABOVE BEST ROSE NOVELTIES FOR 1889, ANY THREE FOR \$1.00.

NEW HYBRID PERPETUAL, ———

GLOIRE DE MARGOTTIN.

After some years, France has again treated us to a genuine sensation in hardy red Roses; it is a step forward in color. For hardiness, growth, foliage and freedom of bloom, this rose may be compared to the well known General Jacquemont, but for color of bud and open flower no rose that has ever been grown has equaled the "GLOIRE." The color may be described as a light crimson scarlet with a brilliant velvety lustre seen only in roses of this class, brighter, nearer a scarlet than any before seen. It has been planted very generally in English gardens and we note in a recent number of an English horticultural paper that one of their largest forcing and cut flower establishments has planted largely of this most brilliant of all roses. We quote from a late number of The Gardeners' Chronicle: "This brilliant H. P. has certainly a great many merits; the variety is vigorous, free, perpetual, forces most easily and has fragrant flowers of most brilliant crimson color." Imported, not forced, postpaid, or larger plants by Express, each, \$1.00; per doz., not prepaid, \$9.00.

DWARF BUDDED HARDY ROSES (IMPORTED).

Budded Roses are now being largely planted by amateurs because they live—are not killed out; they should be planted so that two inches of the budded part is below the surface of the soil, in which case but little trouble is experienced from sprouting; if sprouts appear, they are readily detected and must be removed at once. They are extremely hardy, their depth of planting aiding greatly in standing the repeated attacks of frost and drouth and making them much superior in every way to the small plants so much used. Choice sorts, not prepaid, each, 30c.; doz., \$3.00.

BEST EVER-BLOOMING HARDY ROSES.

STRONG OUT DOOR PLANTS; much more certain to give satisfaction than the small greenhouse plants.

Price, not prepaid, each, 30c.; the set of 10 for \$2.50.

SMALLER PLANTS, by mail, prepaid, the set of 10 for \$1.25; no order filled for less than full set of this size.

BARONESS ROTHSCHILD.—Very large, full double flowers of a silvery bluish color; a vigorous grower.

CAPTAIN CHRISTY.—White, with a delicate peach center; very free-flowering, with good habit and fine foliage.

BOULE DE NEIGE.—Pure white, blooming in clusters; fine.

GEN. JACQUEMINOT.—Unrivalled for its rich velvety crimson color and exquisite fragrance, a strong grower and entirely hardy.

GEN. WASHINGTON.—Dark red; large and very double.

JEAN LIABAUD.—Dark velvety maroon; flowers large, rich and beautiful.

Mme. ALF. DE ROUGE-MONT.—White; blooms in clusters.

PAUL NERON.—Dark rose; largest in cultivation; a remarkably strong grower; free-blooming; almost thornless.

Mme. MASSON.—Large and double; reddish crimson color, fine form and substance. A fine bedder.

LA FRANCE.—Rich pink, well known; grand sort.

VAUGHAN'S HARDIEST ROSES.

Selected for the Northwest! Try them.

STRONG OUT DOOR PLANTS, not prepaid, each 30c., except where noted.

HARRISON YELLOW.—Bright yellow; old garden favorite; the first to bloom in spring.

MADAME PLANTIER.—Best double white; blooms freely in large clusters.

MAGNA CHARTA.—Rosy crimson, cup shaped.

MOSS ROSE, BLUSH.—The old blush rose, sweet; very mossy buds.

— **RED.**—Fine red.

— **WHITE.**—Pure white; sweet scented.

RUGOSA ALBA.—Single, large pure white, fragrant. Each, 60c.

— **RUBRA.**—Single, large crimson, fragrant. Each, 60c.

The Rugosa Roses are absolutely hardy, very vigorous, forming large bushes densely covered with large, glossy green foliage and clusters of flowers from spring to frost. The seed pods are very large, crimson and quite ornamental during Winter months. Imported plants, 60c. each.

PRAIRIE QUEEN.—Climber; has invariably given the greatest satisfaction, flowers very large and round bright rosy red; very double; blooms in clusters.

RUSSELL'S COTTAGE.—Climber; blooms in large clusters; deep crimson, marbled white late in summer.

SWEET BRIAR.—Single, pink; hardy and vigorous; old garden favorite. The leaves have an agreeable odor when slightly bruised.

HELIANTHUS MULTIFLORUS PLENUS.

This new Helianthus is really a gem and should be in every garden. The effect of a single plant is very beautiful, with its very symmetrical pyramidal growth, its rich, dark green leaves and yellow blossoms. The flowers are from three to four inches in diameter, as double as any double Dahlia, and covering the plant from the ground to the top. It is unsurpassed as a cut flower at a season when most other flowers wilt and fade in a few hours, lasting fully a week or more.

Price, each, postpaid, 20c.; 3 for 50c.; 12 for \$1.50.

YUCCA FILAMENTOSA (ADAM'S NEEDLE).

Well known very hardy perennials bearing a low crown of evergreen leaves and spikes two to three feet high of white drooping, lily-like flowers, two inches in diameter. The plant has a very tropical appearance, with its long, narrow, sharp pointed leaves. Each, postpaid, 25c; doz., \$2.25.

TREE ROSES.

FOR some years the most successful rose growers in Chicago, the Parks, wealthy Amateurs and others have been planting Tree Roses; not the large, stiff-stemmed sort so frequently sold, but the more dwarf, pliable, wiry trees that come from Germany, such as are often seen in our parks and suburban gardens. Tree Roses are made by budding our choicest cultivated sorts on the wild, vigorous hedge rose of Europe, hence are composed of two varieties, the stem and roots being the hedge rose, while the top is the cultivated sort; if during growth the stem or root should sprout or branch, it is necessary to at once remove the sprouts, so that the whole force and strength may go to the budded part or head. Planted singly or in groups, they should be nicely staked with round painted stakes. Late in November dig away a little dirt close to one side of the roots, gently bend the tree nearly or quite flat to the ground and cover with earth or strawy manure; in Spring they are quickly raised and staked and the work is done for the year.

Choice varieties, stem three to four feet high, each, \$1.00; doz., \$9.00.

TREE ROSE.

HOLLYHOCKS.

These handsome, showy plants are at present great favorites, having won a popularity almost exceeding that of the Dahlia. Their flowers are large, double and of the most delicate and lovely shades of color; handsome in form as a Camellia. The plants are most effective in rows along fences, or among shrubbery, where their tall stalks, three to five feet high, surrounded with masses of bloom, produce an effect hard to equal with any other plant. They are also especially prized as they continue to bloom until frost sets in. Plant in a rich, deep, well-drained soil; give them a little extra covering through the Winter, and such care will be rewarded with free bloom through several seasons. Our stock consists of fine well-grown plants, which have been wintered in cold frames, and are ready to bloom the first Season. We offer the following varieties:

SNOWBALL.—Double, purest white

RUBY.—Crimson.

CANARY.—Clear canary yellow.

MAROON.—Dark.

ROSE.—Fine rose color.

MARBLED.

WHITE.—With dark centre.

Price, each, 25c.; doz., \$2.00.

JACKMANII.—This grand new deep crimson Hollyhock, introduced by us last year, is one of the finest—very large, often measuring 4½ inches in diameter and forming a perfect rosette. Price, each, 35c.

MIXED VARIETIES.—Good plants, each, 15c.; doz., \$1.50.

For Hollyhock Seed, see page 48.

NEW DOUBLE TROPÆOLUM "DARKNESS."

A most charming novelty; the plant is similar in every way to the single varieties, but it is covered the Season through with large double, rose-like flowers of a lovely dark maroon-crimson color. It is a dwarf grower and one of the most attractive new plants offered. It must be seen to be appreciated, it is a charming plant for bedding, and the flowers are fine for bouquets, growing 2 to 2½ inches in diameter and of the richest color.

Price, postpaid, each, 25c.; dozen, \$2.50.

TROPÆOLUM "DARKNESS."

SMALL FRUITS.

In compliance with the repeated requests of many customers, we have added a Small Fruit Department to our catalogue. As the largest supply of this stock is raised in the East, it will be a convenience to many of our Western and Northern customers to be able to purchase **good plants, well grown and well packed**, three to seven days nearer home.

STRAWBERRIES.

JESSIE STRAWBERRY.

Any soil that will grow corn will grow Strawberries, but to grow big berries and lots of them manure or fertilizers must be used freely. Dig the ground 12 to 18 inches deep (the roots have been known to go three feet down), then plant two feet apart each way; as soon as growth commences, mulch or cover with strawy manure; keep clean; do not let weeds or grass grow. In December cover the plants and bed with long straw, to be removed not too early in Spring. In the season you may rest assured of large, luscious berries.

Varieties marked (P.) have imperfect flowers; they will not produce well unless every fourth or fifth row or plant is a perfect flowering variety, as are all not so marked. Thus planted, the (P.) sorts are the most productive. Dozen prices include prepayment by mail; 100 rates at purchaser's expense; if wanted by mail, add 50c. per 100 for postage. Price, unless otherwise noted, 10c. each; 6 at dozen rates; 25 at 100 rates.

Bidwell.—Nearly as large as Sharpless; productive, delicious flavor. Per doz., 35c.; per 100, \$1.25.

Bubach's No. 5. (P.)—Fruit very large, good quality, very prolific. Wonderful stories are told of its yield; popular in Chicago market. Doz. 50c.; 100 \$2.50.

Charles Downing.—An old variety but one of the best; flavor not excelled. Per doz., 35c.; per 100, \$1.25.

Glendale.—A valuable late sort; a rank grower; fruit large, good quality, very firm. Per doz., 35c.; per 100, \$1.25.

Jessie.—One of the most perfect berries grown, large, prolific, free from rust; in all respects good, bright red, quality best. Per doz., 75c.; per 100, \$4.00.

Jewell. (P.)—Very large, good quality, most productive home and market berry. Doz., 75c.; 100, \$3.50.

Sharpless.—Largest size, mild flavor, healthy grower, fruit always brings highest price in Chicago market. Per doz., 35c.; per 100, \$1.25.

Wilson's Albany.—Well known standard sort. Per doz., 35c.; per 100, \$1.25.

Warfield's No. 2. (P.)—An Illinois variety, more of which is being planted for market and garden purposes than any other. From personal observation during the season of '88, we pronounce it to be the most attractive and best selling berry in our market. Price, per doz., 75c.; per 100, \$3.50.

Henry M. Love, the well known commission merchant, writes under date of Aug. 4, 1888:

"My trade that handled the Warfield Seedling No. 2 last year began inquiring for them long before you began to ship this season. They all pronounced them the finest in the market."

A GARDEN COLLECTION of 100 in 4 best varieties, our selection, not prepaid, \$2.00.

RASPBERRIES.

HANSSELL.

GREGG.

GOLDEN QUEEN.

CUTHBERT.

MARLBORO.

SOUHEGAN.

Plant in rows five feet apart, three feet apart in the row; cut out the old wood as soon as the crop is gathered so that the young canes may have every chance to mature. For best results dig a trench two feet deep and of the same width, half fill with well rotted manure, then with best top dirt; thus prepared, a bed will last for years and give enormous crops of fruit.

Dozen prices include prepayment by mail; plants at 100 rates by express or freight at purchaser's expense unless noted, 10c. each; 6 at dozen rates and 50 at 100 rates.

Cuthbert.—Bright red, very large, extremely prolific; hardy standard sort. Best for family use, upright growth. Per doz., 60c.; per 100, \$2.00.

Hansell.—The earliest red, most hardy, best market sort. Extremely prolific, largely planted. Per doz., 60c.; per 100, \$1.75.

Mariboro.—The largest red, most hardy, vigorous and productive. Best red Raspberry for the north. Per doz., 60c.; per 100, \$2.50.

Gregg.—Largest black cap, enormous bearer, best. Per doz., 60c.; per 100, \$1.75.

Golden Queen. (New.)—A fine new yellow, very delicate flavor, a most delicious dessert fruit, very productive and much superior to the Bruckle's Orange. Each, 20c.; per doz., \$2.00.

Johnson's Sweet. (New.)—By some thought to be the coming black cap, large, very productive, extra quality. Each, 25c. per doz., \$2.50.

Souhegan.—Early, very prolific, larger and better than Doolittle's Improved. Fruit black and of fine quality. Per doz., 60c.; per 100, \$2.00.

BLACKBERRIES.

SNYDER.

Plant in rows eight feet apart, four feet apart in the row. Strong shoots should be nipped at four feet from the ground. For continued good crops plants should receive an annual top dressing of stable manure.

Dozen prices include prepayment by mail; plants at 100 rates by express at purchaser's expense. Unless noted, 10 cents each; 6 at dozen rates; 25 at 100 rates.

Early King. (New.)—Large, of richest flavor, enormously productive. Each, 25c.; per doz., \$2.50.

Snyder.—The old reliable; fruit rich and melting, no core, very hardy; best for rich black soil. Per doz., 75c.; per 100, \$2.50.

Stone's Hardy.—Rather dwarf growth; very productive, hardy. Per doz., 75c.; per 100, \$2.50.

Erie.—Very large, strong grower and enormous bearer. Berries of delicious flavor, large and round; hardy. Each, 15c.; per doz., \$1.50; per 100, \$5.00.

Wilson Jr.—Superior to the well known old Wilson; this and preceding succeed best in the Ohio Valley and the South. Per doz., \$1.00; per 100, \$3.50.

STONE'S HARDY.

GRAPES.

Any fairly good rich soil, not too wet, will grow the following list of grapes. Tender, weakly, late ripening sorts, liable to mildew and otherwise unsatisfactory are omitted. When not planted to run over the trellis or walls, for garden culture, they may be planted six to eight feet apart, and as they grow tied to one or more poles; in November, laid down and covered with earth, an excellent protection for the canes and fruit buds. In Spring, carefully lift the canes and re-tie to poles for summer growth and fruit. 1 yr. plants by mail prepaid; 2 yr. plants by express at purchaser's expense.

Concord.—Well-known, reliable, 1 yr., ea. 10c.; doz., \$1.00; 2 yr., 15c.; doz., \$1.50.

Duchess.—Pale greenish yellow, ripens soon after Concord. Long bunch slightly shouldered, compact, berry medium size, most delicious flavor. 1 year, each 20c.; doz., \$2.00; 2 year, each 25c.; doz., \$2.50.

Brighton.—Dark red, bunch large, long and shouldered, berry medium size, skin thin, flesh tender, quality best, perhaps the best red grape. 1 year, each, 20c.; doz., \$2.00; 2 year, each, 30c.; doz., \$3.00.

Moore's Early.—Black, bunch medium, berries very large, sweet and juicy, excellent quality, very early, a week or more before Concord. 1 year, each, 25c.; doz., \$2.50; 2 year, each, 35c.; doz., \$3.50.

Early Victor.—Black, earlier than Concord, medium size berry, very sweet, vigorous grower. 1 yr., each, 20c.; doz., \$2.00; 2 yr., each, 30c.; doz., \$3.00.

Niagara.—A fine white grape, bunch and berry large, quality good, strong grower, healthy and productive. 1 yr., each, 30c.; doz., \$3.00; 2 yr., each, 40c.

Warden.—Black, a little larger than Concord, better quality, superior in all respects, rather difficult of propagation. The genuine, 1 yr., each, 20c.; doz., \$2.00; 2 yr., each, 30c.; doz., \$3.00.

Wyoming Red.—Red, very early, bunch and berry medium size, very sweet, hardy and productive. 1 year, each, 25c.; doz., \$2.50; 2 year, each, 35c.; doz., \$3.50.

SMALL FRUITS,—CONTINUED.

CURRENTS.

Currents and Gooseberries are the hardiest of small fruits and should have a place in every garden. Plant 3 feet apart each way, in good rich soil; an annual top dressing of stable manure will increase the size and yield of fruit. The Currant-worm, unknown in many parts of the West, is easily killed off by two or three applications of powdered hellbore.

One year Plants at dozen rates are pre-paid; all others at purchaser's expense. 10 cents each unless noted; 6 plants at dozen rate; 25 at 100 rate.

Our 2 year plants are all strong and stocky.

Fay's New Prolific.—The best currant; larger and more productive than any other. \$20,000.00 have already been paid to the owners of the stock as royalty. We quote from the Forest and Garden: "Some four years ago, when Fay's Prolific was announced, the claims for it were regarded as extravagant, but now it has been duly tried, it has been found to be one of the few new fruits which justifies the rosy promises of the introducer." Our stock is from the introducer. 1 yr., ea, 20c.; doz., \$2.00; 100, \$8.00; 2 yr., ea., 20c.; doz., \$2.00; 100, \$10.00.

Cherry.—Very large, immensely productive, most popular sort. 1 yr., doz., \$1.00; 100, \$4.00; 2 yr. per doz., \$1.50.

Gloire des Sablons.—A pretty novelty; currants striped red and white. 1 yr., each, 20c.; doz., \$2.00.

Red Dutch.—Old standard sort of which millions have been planted; very sweet and productive. 1 yr., doz., 75c.; 100, \$3.00; 2 yr., doz., \$1.25.

White Dutch.—Similar to Red Dutch, except in color. Popular. 1 yr., doz., 75c.; 100, \$3.50; 2 yr., doz., \$1.25.

Naples.—The well known black currant. 1 yr., per doz., \$1.00.

GOOSEBERRIES.

For cultural directions, see remarks on currants.

Downing.—The largest of our native Gooseberries; pale green, very sweet. 1 yr., each, 15c.; doz., \$1.50; per 100, not prepaid, \$6.00.

Houghton.—Well known, medium size, pale red; enormously productive. Per doz., \$1.00; per 100, not prepaid, \$4.00.

Industry.—An English variety which has proven a most desirable addition to our native sorts. The fruit is very large, oval, dark red, and of rich and agreeable flavor.

Mr. Temple, of Mass., writes of it: "The flavor of these great berries is equal to that of a fine plum, and they are used as a fine dessert fruit. They are ready for market fully three weeks earlier than any other kind and when fully ripe are of the extraordinary size shown. The color when ripe is a tawny red."

Messrs. Elwanger and Barry say: "Although this is a foreign variety it has succeeded admirably on our grounds, where it has fruited extensively for several years. We can confidently recommend it, both for the garden of the amateur and the market plantation."

For Vegetable Plants, Horse Radish Sets, and Hop Roots, see page 38. Try the Giant Argentine Asparagus, see Novelties.

INDUSTRY GOOSEBERRY.

TREE GOOSEBERRIES.

This novelty is an importation from France and is an attractive variety for the amateur's garden; they are grafted on strong stems 3 or 4 feet above the ground and when loaded with fruit are the prettiest and most interesting plants in the fruit garden. They have been cultivated for a number of years in Europe, and will bear fruit equal to the best bush sorts. Price, not prepaid, each, \$1.50.

HOUGHTON GOOSEBERRY.

SUNDRY ROOTS, ETC.

JERUSALEM ARTICHOKE.

Entirely unlike the common Artichoke except in flavor after cooking. They are cultivated for their tubers, which are especially useful for stock feeding, though they have a table use as pickles. Hogs and sheep thrive on them, and they are said to increase the flow of milk in new milk cows. They, like potatoes, are propagated from cuttings of the tubers. One eye is sufficient; plant the seed in rows 3 feet apart and 2 feet apart in the rows. 3 bushels will seed an acre. Per peck, \$1.25; ½ bushel, \$2.00; bushel, \$3.00.

JERUSALEM ARTICHOKE.

NEW SPANISH PEANUTS.

A new very early and desirable variety with erect stems and upright foliage, much more desirable than the common spreading kind, because more easily cultivated; planted end of April they ripen before Sept. 1st. All things considered this is the best sort for our Northern gardens for the boys to experiment with. Price, pkt., 10c.; lb., 25c.; if postpaid, per lb., 40c.

CHUFAS, OR EARTH ALMONDS.

The nuts grow underground near the surface and are easily reached by pigs or poultry. Excellent for fattening hogs. Plant 10 inches apart and in 3 foot rows. It seed is dry, soak before planting. One peck plants an acre. Price, lb., 35c.; peck, \$1.50.

Vegetable Peach.

This peculiar new vegetable grows on a vine like a melon, and is of a golden yellow color, resembling an orange in shape and size. The flesh is snow-white and excellent for preserves. They are used fried like Egg Plant when green or for

SPANISH PEANUT.

Chinese Yam (DIOSCOREA BATATAS).—A very ornamental climber, much liked in the garden for its cinnamon-scented flowers and pretty heart-shaped leaves. The roots are very hardy, remaining in the ground over winter; the flesh is remarkably white, and when boiled or baked, resembles the Irish potato in taste, but is much finer grained. Plant in moderately dry, deep rich soil; plant bulbets 8 inches apart, or cut the large roots into small pieces and plant at same distance. They are suitable for cooking all the year round, and if left in the ground, will increase in size from year to year. Large roots, each, 15c.; doz., \$1.00.

HARDY • SHRUBS.

PERMANENT ORNAMENTS

For large Lawns and Parks, Hardy Shrubs are best planted in groups of from three to six of a variety, and arranged in this manner make a handsome effect in a short time. Their permanence and hardiness recommend them to all who have large grounds. Our list comprises the best varieties for general use, and our stock consists of strong, well-grown plants that will give satisfaction.

ALTHEA (ROSE OF SHARON).

Most valuable and popular Summer and Autumn flowering Shrubs; of easy growth, blooming the first season.

Alba Plena.—Double white.

Boule de Feu.—Double red.

Coerulea Plena.—Double blue.

Coelestis.—Single blue, not a dull purple, but blue with deep violet spot at base of each petal; rare and choice. Each, 35c.

Variegatus Plenus.—Green leaves, broadly margined with creamy white, flowers double red, one of the very best variegated-leaved plants known; generally scarce, always in demand. Each, 35c.

Price, postpaid, 20c., except where noted; larger plants will be sent if ordered by express.

BOX (DWARF).

We have frequent calls for this evergreen border or edging garden plant, hardy south of the Ohio river. Good plants by mail, \$1.00 per dozen; by express, \$3.00 per hundred.

DEUTZIAS.

Early spring-flowering shrubs, with long, graceful spikes of white flowers from every bud or eye, pretty foliage, upright growth; handsome lawn shrub.

Crenata Fl. Pl.—Double white, tinged with pink.

Gracilis.—Snow white; extremely pretty; much used by florists for forcing.

Pride of Rochester.—Large flowers, white, back of petals rose.

Price, postpaid, each, 15c.; doz. \$1.50.

LILACS.

Among the hardy shrubs few are so justly esteemed as the Lilac; few others will grow and thrive in poor soil, stand abuse, neglect, drouth, heat and cold and in return give such quantities of bloom; its great clusters of fragrant lilac flowers are too common to need much description. We have this season imported from France several new lilacs, including some double varieties, new even in Europe, and some new single sorts remarkable for size of bloom, trusses and color. Large imported plants, not postpaid unless noted.

Alba.—The old white sort. Each, postpaid, 15c.; doz. \$1.50.

Bertha Dammann.—(New.) Very large truss; brilliant color. Imported plants. Each, \$1.00.

Marie Leguay.—(New.) Grand trusses of pure white flowers; florets very large. Immensely superior to the old white garden Lilac. Messrs Paul & Son, London, write; "We believe it to be the finest of white Lilacs." Fine imported plants. Each, 75c.

Pyramidalis.—(New.) Pyramidal clusters, very compact double blooms with several corollas fitted one in another. Flowers, pale blue, carmine buds. Imported plants, each, \$1.00.

Rubra de Marley.—The well known Lilac, common in gardens and much used by florists for forcing. Each, postpaid, 15c.; doz. \$1.50.

Souvenir de L. Spath.—The finest of the single sorts, the flowers are large, and of a bright scarlet color, not only in bud, but also when flowers are completely opened. Raised in Germany. Imported plants. Each, \$1.00.

PHILADELPHUS (MOCK ORANGE OR SYRINGA).

Tall growing shrubs of easiest culture, bloom early in summer, bearing quantities of fragrant white flowers; very free-blooming.

Coronarius.—Large clusters of sweet-scented, pure white, orange-like flowers. Each, 15c.

Dianthiflorus.—A double flowered form of the Coronarius; not so tall a grower. Each, 15c.

SAMBUCUS (ELDER).

Very pretty singly or in groups, the leaves are much divided, very long and drooping and have a charming fern-like appearance.

Seratifolia.—Fern-like leaves. Each, 25c.

Foliis Luteis.—Leaves handsomely variegated with yellow and green. Each, 25c.

SPIRÆAS.

Loveliest of low-growing, early spring flowering shrubs.

Ariefolia.—Very dwarf, covered with a sheet of white flowers in spring. Each, 15c.

Billardi.—Branches terminated with clusters of rosy pink flowers. Each, 15c.

Bumalda.—Little clusters of pure white flowers an inch apart on long slender branches; charming. Each, 15c.

Reevesii fl. pl.—(Bridal wreath.) Similar to the above, except that the little flowers are as double as a rose. Each, 15c.

VIBURNUM OPULUS (SNOWBALL).

Well known garden shrub; early and free of bloom; an old garden favorite. Each, 15c.; larger plants, each, 35c.

Pompon Rouge.—Dwarf, dble. red.
Totus Albus.—Single white.
Violacea.—Double violet.

HYDRANGÆA PANICULATA.

HYDRANGÆAS.

Paniculata Grandiflora.—Tens of thousands of these noble summer and autumn flowering shrubs have been sold the past few years and the demand is still good. They are absolutely hardy, grow in any soil, and bloom the same year they are set out; they flower abundantly, bearing immense panicles of bloom, white at first and turning to rose in autumn. To make a fine specimen, the soil should be as carefully prepared as for any fine shrub. An annual shortening of the branches tends to increase the size of the flowers. Each, 15c.; larger plants 25c. and 50c.

HALF HARDY HYDRANGÆAS.

Popular window garden and house plants; when grown in large pots they quickly make fine specimens. They are easily wintered in a cool cellar, keeping the roots barely moist. For summer decorations of verandas and lawns, no plants are more showy than their glossy large-leaved shoots, each terminated by splendid heads of white and pink flowers.

Japonica Variegata.—Leaves green, broadly margined white; fine foliage plants. Ea., 35c.

Mme. Von Siebold.—Rosy pink flowers. Ea. 25c.

Otaksa.—Deep rosy pink, very large panicles; vigorous grower. Ea. 20c.; larger plants, ea. 35c.

Thos. Hogg.—Pure white, dense heads; a fine companion to Otaksa. Each, 20c.; larger, 35c.

WEIGELIA.

Handsome summer flowering shrubs, the long branches loaded with clusters of tubular, trumpet shaped flowers.

Hortensis Nivea.—Fine white. Each, 25c.

Rosea.—Well known, bluish white. Each, 15c.

Nana Variegata.—Leaves margined with creamy white, flowers pale pink; one of the best variegated shrubs known. Each, 15c.

STAPHYLEA COLCHICA.

The branches terminate in large clusters of white flowers, lasting a long time; rare and valuable, best suited for region south of the Ohio river. Each, not prepaid, 50c.

SPIRÆA.

Prices include Prepayment by Mail unless noted; larger Plants sent if Ordered by Express.

SOME CALIFORNIA SEEDS, PALMS AND OTHER SPECIALTIES.

The varieties below are not all "Novelties," although they may be new to many of our customers, but they consist of a number of rare, odd and comparatively little known plants, which we are confident will prove more satisfactory than many a novelty, and would advise those of our customers who want some extra choice flowers, not commonly cultivated and at a small cost, to include some of the varieties listed below in their order.

WILD CUCUMBER.

IPOMOEA HORSFALLIAE.—A showy and handsome climber from the West Indies, with deep, rich, glossy rose-colored flowers. Pkt., 10c.

IPOMOEA RUBRO COERULEO FL. ALBO.—Magnificent climber; large white flowers. Pkt., 10c.

GIANT ARIZONA THISTLE.—Grows 6 to 9 ft. in height, very slender with finely cut foliage and a scarlet blossom that is very striking. While we do not commend the thistle as a foliage plant, we did think this the most striking plant we saw on our overland trip. Pkt., 15c.

WILD CUCUMBER.—Quickest climber for arbors, fences, etc. A well-known vine. Pkt., 5c.; oz., 20c.

CACTUS.—Many varieties. Ex. choice mixed. Pkt., 10c.

WASHINGTONIA Robusta.

A magnificent palm of the first order. It grows very rapidly, is the hardiest of all the Palms and resembles the elegant growth of the *Latania borbonica*. With the simplest culture in pots and in common garden soil it furnishes splendid market plants of 18 inches to 2 feet high in three years; stands very low temperature without suffering. Price, 10 seeds, 25c.; 100 seeds, \$1.50.

WASHINGTONIA.

BRAHEA FILAMENTOSA.—The California Fan-Palm, a hardy, vigorous growing plant; foliage very regular, of a bright green, deeply and regularly pinnated, the margins of each being covered with long, hair-like, filaments, giving them a very remarkable appearance from other fan-palms. They are beautiful decorative plants in all respects, either for in or outdoor use. Price, 10 seeds, 15c.

CHAMAEROPS EXCELSA.—One of the hardiest of the Palms; foliage dark green; the segments of the fan deeply cut, almost to the top of leaf-stalk, which are on the edges covered with tooth-like spines. This species grows into small trees from fifteen to twenty feet high; very desirable for outdoor decorations. Price, 5 seeds, 10c.

SABAL PALMETTO (Palmetto Palm).—A native of Florida, highly ornamental. Price, 10 seeds, 15c.

AQUILEGIA OLYMPICA FL. PL. (New Double Columbine). A splendid sort; dark blue, very double flowers with a clear white center. Pkt., 10c.

AQUILEGIA ATROVIOLEACEA PLENA.—Flowers dark blue, very double, foliage variegated, splendid sort. Pkt., 10c.

CAPSIUM ANNUM TOM THUMB.—A most charming plant, producing an abundance of dark scarlet fruit, almost covering the plant. Pkt., 10c.

DELPHINIUM CARDINALE.—A native of California. A very handsome annual species, remarkably well suited for borders; flowers bright scarlet, with the petal limbs distinctly yellow. Height, 3 to 4 feet. Pkt., 10c.

DELPHINIUM FORMOSUM COELESTINUM.—One of the most brilliant of hardy perennials; flowers most charming sky-blue. Ht. 3 ft. Pkt., 10c.

IPOMOEA LEARI.—A very rapid growing and handsome climber with flowers of the brightest blue, numerous produced. Pkt., 10c.

NEW JAPANESE HOP.—A new climber recently introduced from Japan; it resembles in habit our common hop, but the foliage is more deeply cut and very dense. An extremely rapid grower. Pkt., 10c.

LOBELIA LITTORALIS.—Very pretty species of trailing habit most suitable for hanging baskets and rockwork. The leaves are small, almost round and grow very dense, completely covering the basket or pot. The slender trailing branches are covered with pure white flowers when in bloom and afterward with the berry-like seed pods which change from light green to bright red when ripe, so that whether in flower or fruit the plants are equally attractive. Per pkt., 25c.; 3 for 60c.

LOBELIA LITTORALIS.

NEW DOUBLE IVY GERANIUMS.

IMPORTED FROM EUROPE.

JUST now Double Ivy Geraniums are attracting more attention than any other section of the Geranium family, deservedly so for while the common Ivy Geranium with its scant bloom has long been a favorite on account of its glossy leaves and its graceful habit, the new hybrid seedlings of this class which have been produced by the French growers rival in beauty, in freedom of bloom and soft delicate colors, even the celebrated Lady Washington or Pelargonium Geraniums; in fact we doubt if any class of plants has been improved more than this and none astonished us more, when visiting the plant specialists at Lyons, France, the past summer, than these beautiful new types grown by them.

BASTIEN LEPAGE.—Enormous truss and florets, semi-double, rosy mauve, upper petals veined purple.

JEANNE GILLET.—Purple violet, very double, splendid variety.

LAMARTINE.—Lively red, full double, in advance of any red.

MON PREMIER.—Soft satin rose color with white centre, truly the "first choice" of every one.

GLORY DE LORRAINE.—Very large double rosette shaped flowers of a brilliant cherry color, a splendid variety.

Price 40c. each. The set of 5 new sorts and the best double white, **JEAN D'ARC**, for \$2.00.

DOUBLE GERANIUMS.—12 Best varieties, all colors, by mail, postpaid for \$1.00.

SINGLE GERANIUMS.—12 Best varieties all colors, by mail, postpaid for \$1.00.

BEDDING GERANIUMS.—Double or Single, by express, not prepaid, solid colors, Scarlet, Crimson, Pink, Salmon or White, for large beds. 50 for \$3.25; 100 for \$6.00.

THE WILD GARDEN.—Always in bloom; a complete assortment of hardy flowers, annuals and perennials of easiest culture; just the thing for a bare spot in the garden. Per pkt., 10c.; 3 for 25c.

* A FEW NEW AND CHOICE VEGETABLES. *

NEW WOODBURY SQUASH.

THIS was produced by crossing the Hubbard on the Butman. Its outward appearance is similar to the Hubbard, but is smoother, its flesh is of a lighter color. In quality it is of the best, being dry, mealy, and of a sweet, delicious flavor. They are good to eat as soon as ripe, good keepers, of hardy growth and good to yield. It is the driest of all squashes, and a trifle earlier than the Hubbard. Pkt. 15c. 4 for 50c.

THE LORILLARD TOMATO.

"THE LORILLARD TOMATO" is the result of a cross between *Acme* and *Perfection*. It is equal, if not superior to *Perfection* when grown out of doors, but as it has a much better constitution, it will always out-crop that variety, in poor soil especially. It sets freely with four and five fruits to a bunch, all equal and of good size, and the color, which is vermilion-scarlet, gives it great value. The shape is a plump round, not quite so flat as that of *Perfection*, smooth and clean cut; and when very far advanced in maturity, takes on a bluish tint. As a variety for forcing under glass, it is the best and it is without a rival in the important features of prolificacy, color, flavor and solidity. The product of 300 ten inch pots, each containing 1 gallon of clear loam, was SEVEN THOUSAND FIVE HUNDRED POUNDS OF FRUIT, being an average of twenty-five pounds to a plant—all of fine marketable size, firm and handsome in appearance, while the flavor was equal to the best outside grown tomato. Per pkt. 25c.

NEW ESCHENDORF MANGEL.

ORIGINATED by a German seed grower, who produced it by crossing the French Imperial Sugar—the sweetest of all—with the German "Wanzleben," a sort celebrated as a heavy cropper. The result has been a variety combining both qualities and with them a form and size that is nearly perfection in this class of root. It is bound to be a great favorite wherever tried. Price: Eschendorf Yellow, pkt. 5c., oz. 10c., 1/4-lb. 30c., lb. \$1.00; Eschendorf Red, pkt. 5c., oz. 10c., 1/4-lb. 30c., lb. \$1.00.

NEW GIANT YELLOW INTERMEDIATE MANGEL.

A DECIDED improvement on the *Yellow Intermediate Mangel*, being considerably larger, more than half above ground and of a more grayish or rather of russet yellow color. It is remarkably even in shape, elongated and of vigorous growth. It has a fine neck, large leaves and a very smooth skin. Flesh white, firm and sweet, much liked by cattle. Taken in all this is a splendid mangel, easily gathered, enormously productive and an excellent keeper. Per pkt. 5c., oz. 15c., 1/4-lb. 30c., lb. \$1.00.

NOTE.—OUR GEM CULTIVATOR at \$7.00, is both single and double wheel. Beware of a cheaper style which omits the single wheel combination. Where the Double Wheel Machine is wanted, without the single, we will supply it for \$5.00.

IMPORTED BULBS FOR FALL PLANTING.

Hyacinths, Narcissi, Crocus and other Spring flowering bulbs, which we import in large quantities, will be ready about September 15th. Write us at any time for catalogue, we can mail at any time and book your order for delivery in the Fall when the bulbs arrive.

NEW PRELUDE TOMATO.

AWARDED A FIRST-CLASS CERTIFICATE BY THE ROYAL HORTICULTURAL SOCIETY OF LONDON.

THIS new tomato was obtained by crossing the Little Gem with the Acme. The plants are wonderfully prolific, bearing their fruit in large clusters. The fruit is nearly round, perfectly smooth, and of a bright crimson red. It is more than twice as large as the Little Gem, very solid, and in quality equal to the very best. The skin is firm and perfectly free from rot. In earliness it is fully up to the "Little Gem," if not earlier. It does equally well under the glass or in open air. Per pkt., 25c.

ONION, LARGE RED WETHERSFIELD.

WHILE gardeners in various sections of the country choose their main crop varieties of onions according to local demand, and in one section plant Early Red Globe, in another Early Round Danvers and in a third, the White Globe or Large Red Globe, yet for general purposes the country over no variety is so largely planted as the *Large Red Wethersfield*. It is because of the demand for this, that we have taken special pains each season with our stock, and believe none better can be found. Price, which includes prepayment by mail packet, 5c., ounce 15c., 1/4-lb. 50c., lb. \$1.60, 5-lb. lots at \$1.50 per lb.

FOR ALL NEW TOMATOES see special offer at top of page 37 of this catalogue.

SCOVILLE'S HYBRID TOMATO was excellent, the best I ever saw. Chicago cucumber was simply immense.

C. O. RINEHART.

Leaf River, Ill.,

Oct. 25, 1888.

STEEL GALVANIZED LAWN-SETTEE.—The pattern shown is 4 feet long, seating two persons. It is practically indestructible, made in one piece, solidly braced in its feet, and taken all in all, for garden, lawn, veranda, summer house or cemetery, is without a fault and cannot fail to give satisfaction. Price, delivered at freight or express office in Chicago, \$10.00.

PLANT BED CLOTH.—The makers of this article having gone out of business, we cannot offer it at this writing. If it is made later we shall have it, and can quote on application.

LIGHTNING POTATO EYE CUTTER does the work many times faster and is more accurate than the knife. It is gnaged to cut enough flesh with each eye to strengthen and vitalize it and does the work in a scientific manner. Post paid, 30c.

RUSTIC WORK, Summer Houses, Vases, Baskets, Bridges, etc. Write for prices.

GEM WEEDING HOOK.—The cut shows how useful the sharp prongs can be made to loosen the soil and remove weeds. Price, each, 25c., postpaid, 30c., not prepaid, 5 for \$1.00.

GOMSTOCK'S GARDEN SEEDER—It is specially adapted to sowing onion seed at the rate of four, five or six pounds to the acre. It has a click and slide motion, with a circular plate, perforated with ten graduated holes, attached to the slide and agitator. This seed sower is light enough to be lifted around easily at the ends of the rows in sowing. It is a GOOD DRILL, and a cheap one. Weight, boxed, eighteen pounds. Price, only \$6.50; with the Gem cultivator, \$11.00; with Gem with double wheel, \$12.50.

RUHLMAN'S WHEEL HOE.—One of the best garden weedeers. It can be set from seven to sixteen inches in width. It is especially adapted to the culture of all garden crops (particularly onions, carrots, beets, parsnips, and nursery stock that require careful hand cultivation in the early stages of their growth. Price, boxed, \$4.00. Weight, thirty-five pounds.

COMBINE YOUR ORDERS for Seeds, Tools, Fertilizers, and secure the same in one freight shipment at lowest rates.

VAUGHAN'S CHICAGO PARKS LAWN GRASS

A BEAUTIFUL LAWN, with its close, velvety turf, is a most essential feature in the adornment of all suburban homes—without it the finest flowering plants and bedding seems insignificant, while with it, handsome grounds are assured, even with no other adornment. Second, only to that prime requisite, GOOD SEED, is time of sowing, quantity to use, preparation of soil, etc. AS A GRASS SEED MARKET Chicago is known to be the greatest in the world, supplying many foreign countries as well as much of the United States. We are therefore as well able to meet this demand as any house in the country. Our mixture of grasses has proved through tests in different sections (besides its local use) especially adapted to the hot, dry atmosphere of the Inland States. Prof. Beal, in his report on the subject, has placed our Mixture at front of his book, so prominent has it become in the West.

Our prices for extra clean seed (includes handsome boxes or bags, free) are as follows:

CHICAGO PARKS MIXTURE: (POSTAGE EXTRA 8 CTS. PER LB.)

First Quality—1b., 25c.; 5 lbs., \$1.00; bush., \$3.50; 3 bush., \$10.00.

Second Quality—1b., 20c.; bush., \$2.50; 3 bush., \$6.75.

BLUE GRASS, Extra Clean (Fancy)—5 lbs., 75c.; 1 bush., \$1.25.
[Special rates for 5 or 10 bushel lots].

RED TOP, Extra Clean—5 lbs., 50c.; 1 bush., (14 lbs.), \$1.00.

WHITE CLOVER, Extra Quality—1 lb., 30c.; 4 lbs., \$1.00.

ALFALFA—OR LUCERNE CLOVER (MEDICAGO SATIVA).

ALFALFA.—B. F. Johnson, one of the most reliable agricultural writers of the time, says:

"In many large towns and some small ones, cows and other stock are not permitted to run at large, and division and street fences have been taken down and removed. Under these conditions, a patch of Alfalfa of a half acre or more, will be found a precious recourse for green forage for those who keep a cow or two, and not having land enough in grass, do not care to have the trouble and cost of leading them to and from pasture morning and night. Half an acre in Alfalfa a year old well set, will furnish green stuff enough to keep a cow from one end of the growing season to the other. But to get the best satisfactory results, great care must be taken to have a good stand. To do this, have the land heavily surface manured and then plow deep and harrow afterwards. Then sow the seeds in drills, twelve inches apart, at the rate of 20 pounds to the acre. Then cultivate and keep the weeds in complete subjection. If sown late in April, the first blossoms will show about the tenth of July, and a few days thereafter, the foliage of the young Alfalfa, not over six inches high, will turn yellow. This is a sign the first crop must be harvested and removed. The second crop will then start and by the last week in August it will have grown and may be cut and fed as wanted. After that, the third crop will make its appearance and continue green and growing till frost comes, and may be utilized as the second crop has been. Before freezing weather, the Alfalfa must be covered with straw or litter so as to prevent winter killing, or the freezing of the crowns. After the first year no protection will be necessary. The second year, cutting for feeding may begin late in May. Starting on one side of the patch and cutting as wanted for green feed, by the time it is gone over to the end, the growth on the opposite end will be large enough to begin cutting the second crop and so on with the third.

But let nobody make an experiment with Alfalfa and hope to avoid failure, unless he is willing to give as much labor to it the first year in the way of weeding and hoeing, as to an onion patch. For the first few weeks, Alfalfa is a delicate plant and is easily overgrown and smothered; after the first year, it takes possession of the land and resists the adverse influences of heat and drought and the invasion of grass and weeds as sturdily and successfully as a Jack Oak.

Our LAWN FERTILIZER, Bone and Phosphates, (see page elsewhere) is a most desirable article for supplying the soil with requisite food for a luxuriant growth of grass, and avoiding all the objectionable features of animal manure, as well as weeds, seeds, etc. Our customers who have had it once will have no other. It can be supplied either in the Spring, Summer, or Fall, at the rate of one pound to sixteen square feet. Price, 5 lbs., 30c.; 10 lbs., 50c.; 25 lbs., \$1.00; 50 lbs., \$1.75; 100 lbs., \$3.00.

ALFALFA, OR LUCERNE CLOVER.

The demand for this great forage plant which is so extensively grown on the Pacific Coast that it is sometimes called "California Clover," has increased wonderfully throughout all the Southern and Western States, and has been much planted in the Middle States. It is important that the seed be sown in rich soil and thoroughly cultivated from weeds for the first Summer. It gives a fair yield the first season, and the second is enormous. It is said to thrive best in loose soil as the roots run deep; it stands drouth exceedingly well, one writer calls it a "child of the sun." Sow eight to twenty-five pounds Per lb., postpaid, 30c., 5 lbs., 90c.; bush., 60 lbs., \$8.50; 2 bush., bag included, \$16.50.

IF TO GO BY MAIL ADD 8 CENTS PER POUND FOR POSTAGE.

RED TOP GRASS.

KENTUCKY BLUE GRASS.

TALL MEADOW OAT GRASS.

SWEET VERNAL GRASS.

ENGLISH RYE GRASS.

THESE PRICES are liable to market changes daily, but include bags at rate here given. When written quotations based on market for the day are sent they DO NOT include bags, for which in ordering add 20 cents each.

ORCHARD GRASS.—*Dactylis glomerata*.—KNAULGRAS.

It is a very rapid growing variety, excellent both for haying and grazing, grows in almost any soil containing sufficient clay and not too much water. Its long, deeply penetrating and fibrous roots enable it to grow vigorously during droughts. It can be mown from two to four times a year, according to locality and treatment. It is easily cured, and preferred by animals to other grasses in mixtures. One peck of red clover to six pecks of orchard grass is a good proportion per acre. If sown alone $2\frac{1}{2}$ to 3 bushels per acre is sufficient. Per lb. 20c; bush. (14 lbs.) \$2.00.

RED TOP GRASS.—*Agrostis vulgaris*.—RASENSTRAUSSGRAS.

This is an excellent pasture grass and valuable for lawns. It thrives well in almost any kind of soil, and produces a very firm sod. If alone, sow 2 bushels per acre, with timothy 6 to 10 lbs. per acre make a fine pasture. Per lb. 15c; bush. (14 lbs.) \$1.00.

KENTUCKY BLUE GRASS.—*Poa pratensis*.—WIESEN RISPEN GRASS.

Also known under June and Meadow Grass. Very desirable for pasture and lawn. It stands cold and drought well, is perennial and furnishes grazing a large part of the year; thrives best on rich soil. Sow 3 bushels per acre. **EXTRA CLEAN**, per lb. 15c; (14 lbs.) \$1.00. **FANCY**, per lb. 20c; bush. \$1.25.

TIMOTHY.—*Phleum pratense*.—TIMOTHEE.

Also called Herd's Grass. Universally known. (See note on top of page). Sow 15 to 20 lbs. to the acre. Per lb. 10c; 5 lbs. 50c; bush. (45 lbs.) \$2.00.

SHEEPS FESCUE.—*Festuca ovina*.—SCHAFSCHWINGEL.

Excellent for sheep pasture; grows well on dry, sandy ground. Sow $2\frac{1}{2}$ bushels to the acre. Per lb. 20c; bush. (12 lbs.) \$1.50.

TALL MEADOW OAT GRASS.—*Avena elatior*.—FRANZ. RAYGRAS.

A variety extensively used for soiling. It succeeds well in sandy lands and owing to its long fibrous roots, stands cold and drought well. It makes good hay but must be cut the instant it blooms; its nutritious qualities are very high. Does well with Orchard Grass and Red Clover. Sow 3 bushels to the acre. Per lb. 18c; bush. (14 lbs.) \$2.25.

TIMOTHY.

MEADOW FESCUE.—*Festuca pratensis*.—WIESENSCHWINGEL.

One of the best grasses for hay and permanent pastures, it stands drought admirably and thrives on any kind of soil or location. It makes a very good hay, much relished by stock; when in bloom. Sow 2 bushels to the acre. Per lb. 16c; bush. (14 lbs.) \$1.90.

SWEET VERNAL GRASS.—*Antoxanthum odor.*—GERUCHGRAS.

Very valuable for mixtures on account of its early growth; it is perennial and hardy, and grows one to two feet high. It emits a delightful odor which it imparts to hay with which it is cured. Per lb. 50c; bush. (10 lbs.) \$4.00.

MEADOW FOXTAIL.—*Alopecurus pratensis*.—WIESEN FUCHSSCHWANZ.

This grass is in appearance very similar to Timothy, but grows much more rapidly than the latter after cutting. It grows best on rich, moist or even wet soils, and is one of the most reliable grasses for permanent pastures. Sow 3 bushels to the acre. Per lb. 30c; 10 lbs. \$2.25.

WOOD MEADOW GRASS.—*Poa nemoralis*.—HAINRISPENGRAS.

Succeeds best in moist shaded grounds, and is specially adapted for wood pastures, but does equally well in exposed situations and on light soil. Sow 2 bushels to the acre. Per lb. 40c; bush. (14 lbs.) \$4.00.

ROUGH STALKED MEADOW GRASS.—*Poa trivialis*.

Resembles Kentucky Blue Grass; thrives as above, best in rich moist shaded grounds and is much liked by cattle. It makes a good mixture with red top and orchard grass. Sow about 20 lbs. to the acre. Per lb. 40c; bush. (14 lbs.) \$3.00.

WOOD FESCUE.—*Festuca duriuscula*.—WECHSELB. SCHWINGEL.

A dwarf growing grass, for dry locations; very good for pastures. Sow $2\frac{1}{2}$ bushels to the acre. Per lb. 25c.

CREeping BENT GRASS.—*Agrostis stolonifera*.—FIORINGRAS.

Succeeds well in any situation, and is specially well adapted for lawns. Sow 2 bushels per acre. Per lb. 40c.

ENGLISH OR PERENNIAL RYE GRASS.—*Lolium perenne*.—ENGLISCHES RAY GRASS.

The most prominent grass in England. It is a very rapid grower but does not stand the drought well and exhausts the soil. It grows about 18 inches high and should be cut before blooming. Sow 25 to 30 lbs. to the acre. Per lb. 15c; bush. (25 lbs.) \$2.25.

ORCHARD GRASS.

Tall Fescue, lb. 30c; 10 lbs. \$2.50.
Crested Dog's Tail, per lb. 25c;
10 lb. \$1.00.

WHITE DUTCH CLOVER.

Grows naturally in pastures in almost any soil and situation, but thrives best in damp locations. It is indispensable for parks and lawns, making a very firm sod. Sow 6 lbs. to the acre. Per lb. 30c; 4 lbs. for \$1.00; bush. (60 lbs.) \$10.00.

MEDIUM RED CLOVER.—*Trifolium pratense*.

Excellent for pasturage or hay, a necessity in all grass mixtures, and valuable as a green manure. Sow 8 to 20 lbs. per acre if used alone. Is mostly sown with timothy. Per lb. 20c; 5 lbs. 75c; not prepaid; bu. (60 lbs.) about \$5.85.

ALFALFA or LUCERNE CLOVER.—*Medicago sativa*.

Thrives best in light and sandy soil. It is grown in the South to a great extent, where it is cut three or four times during the season, giving enormous yields. It withstands drought exceedingly well. Sow 8 to 25 lbs to the acre, Per lb. 30c; 3 lbs. 75c; by mail prepaid, 3 lbs. \$1.00; bush. (60 lbs.) \$8.50.

ALSIKE or SWEDISH CLOVER.—*Trifolium hybridum*.

This is superior to the red clover in feeding qualities, furnishing more flesh and fat forming materials. It is valuable for grazing, and makes good pasture and hay with orchard. Sow 6 lbs. to the acre. Per lb. 30c; 10 lbs. \$2.00.

RED MAMMOTH CLOVER or PEA VINE.

Is a vigorous grower, with large, coarse stalks of 5 to 6 feet high, used largely for plowing under for manure. It ripens later than common red clover, is sown with timothy, orchard and other grasses, thereby greatly increasing the quality of the hay. Per lb. 20c; 5 lbs. 75c; bu. (60 lbs.) about \$6.00.

SAINFOIN or ESPARSETTE.—*Onobrychis sativa*.

This kind is grown largely in France and Southern Europe where it is highly valued for its feeding qualities. It grows in light chalky soils and lasts for a long time. Sow 1 bu. (22 lbs.) to the acre. Per lb. 20c; 10 lbs. \$1.50.

COMMON MILLET.—*Panicum Miliaceum*.

An excellent forage grass; very early. For grain, sow $\frac{1}{4}$ bu. to the acre, for hay $\frac{1}{2}$ bu. Per bu. (50 lbs.) 50c.

GERMAN or GOLDEN MILLET.

A medium early forage grass; prolific of both stalks and grain. Sow 25 to 35 lbs. to the acre. Per lb. 10c; bu. (50 lbs.) 90c.

In case of important changes in Grass Seed prices, write us before you buy.

VAUGHAN'S FORAGE PLANTS, MOSTLY OF RECENT INTRODUCTION.

The rates for Single Pounds include prepayment by mail; larger lots go at buyer's expense.

-- FIVE NON-SACCHARINE SORGHUMS. --

From Kansas where the following forage plants have been extensively grown, we give some notes and descriptions from a leading agriculturist of that State; he says: "All these varieties bear dry weather well. Where corn will wholly fail for want of rain, at a certain stage, these plants simply stop and wait for rain, and then go on and make their full yield. In weight of grain they will make more per acre than the same land will make of Corn. In the way of dry forage they make enormous returns, at a cost less than the cost of gathering alone of corn fodder. They will grow on any land where Corn will, even on land too poor for Corn." All 50 lbs. to the bushel.

Price, for any of these 5 kinds, per lb., postpaid, 25c.; 5 lbs., \$1.00; not prepaid, peck, 12½ lbs., \$1.25; bushel, 50 lbs., \$4.25.

KAFFIR CORN.—This is the earliest of the five varieties. It made two crops of seed, first crop ripens in August, second in October. It averages 40 bushels of seed per acre. It grows from four to five feet high, making a straight, upright growth. It has a stocky stem, with numerous wide leaves. The stalks keep green, and are brittle and juicy, not hardening like other varieties of sorghum, making excellent fodder, either green or dried, which is highly relished by cattle, horses and mules. The seed heads form at the top of each stalk, and as soon as these show the grain well, the joints next below the top send up shoots which yield the second seed heads. If grain chiefly is desired, these heads may be allowed to mature on the stalk, and then the whole stalk may be cured into fodder; for it is not, even then, so hard but that it will be easily cut up and well liked by cows and mules. But if the crop is wanted mainly for fodder, it is recommended to cut down the whole stock when the first seed heads come into bloom, at which stage it cures admirably and makes most excellent forage. The second growth, springing at once from the roots, will still mature (in climates similar to Central Kansas) a full crop of grain and a second full crop of forage before the middle of October. Sow in rows three feet apart, three to five pounds of seed to the acre.

WHITE MILLO MAIZE, OR BRANCHING DHOURA.—Of South American origin, already well advertised and distributed. Valuable as a forage plant and for its grain, having great capacity to stand drought. It can be cut and fed at any stage, or cured when heading out, for fodder. It bears grain in erect full heads, and is almost equal to corn for feeding all sorts of stock; also makes excellent meal. It requires all summer to mature seed. Plant in April, three to five seed in a hill, eighteen inches apart four foot rows, and thin to two plants and cultivate as Corn. It shoots out greatly and makes a great amount of foliage. Three to five pounds per acre. Can be cut for green feed several times a season. Average yield of seed about 40 bushels per acre.

YELLOW MILLO MAIZE, OR YELLOW BRANCHING DHOURA.—This growth is tall, nine to twelve feet, stooling from the ground like the White Millo Maize, but not so much. The seed heads grow to great size on good land, often weighing three-fourths of a pound, sometimes a full pound after being fully ripe. These heads are set close and solid, with a large plump grain, double the size of White Millo, and of deep golden yellow color. By reason of size and weight, each head is fully equal in grain to a fine ear of Corn. The heads begin to turn down usually as soon as formed, and when ripe it hangs on a short goose-neck stem. On account of its branching habit, and tall, massive growth, this grain should be planted in four to five foot rows, and two to three feet in the drill, according to the quality of the land, two plants in a hill. The cultivation is like corn. Average yield 50 bu. of seed.

LARGE AFRICAN MILLET.—A variety of Sorghum, Non-Saccharine, growing stalks eight to ten feet high, and yielding heads of grain twelve to fourteen inches long, weighing six ounces to a half pound when fully ripe. The foliage corresponds to the foliage on Amber Cane. If the whole stalk is cut down and cured when the seed are in the dough state, it makes excellent forage, easy to cure, keeps well in out door shocks, and much liked by stock in the winter. If cut in the green state, it makes excellent green feed and the shoots that spring at once from the root make a second crop of forage. In appearance this grain is hardly distinguishable from the Millo Maize, or Rural Branching Dhoora, and has often been confounded by seedsmen. It bears dry weather and gives a crop where Corn would wholly fail. Plant in early Spring, in three foot rows, leaving one or two plants every twelve inches in the row, and cultivate as Corn. This variety made the most forage for us in Kansas trials, besides 50 bushels of seed per acre.

EGYPTIAN RICE CORN.—This kind has been grown for a good many years in Kansas, especially in the western parts, and is well known. It does not stool; stalks grow from six to eight feet high, producing a large seed head which hangs down on a short goose-neck stem, same as Yellow Millo Maize. Plant early in May, 5 to 6 lbs. to the acre. A fair yield is 40 bu. per acre.

ESPERSETTE, OR SAINFOIN.—This is a vegetable plant, with many stems from two to three feet long, straggling, tapering, smooth leaves in pairs of pointed, oblong leaflets, slightly hairy on the under side; flower stalks higher than the leaves, ending in a spike of crimson or variegated leaves, succeeded by flat, hard pods, toothed on the edges and prickly on the sides; root perennial, and hard and woody; flowers in July. It is an excellent forage plant, and improves the quality and increases the quantity of milk when fed to milch cows. It has been experimented with in Utah, Idaho, and other Territories and Western States, along side with the Alfalfa, and is said to do just as well, if not better than this valuable clover. Sow one to two bushels per acre. 32 lbs. to bushel. Price, postpaid, lb., 30c.; not prepaid, 5 lbs., 90c.; 10 lbs., \$1.50.

SERADELLA.—A fine fodder, of good quality, admitting of one, and sometimes two cuttings in one season. It succeeds well in a dry, sandy soil, and furnishes a good pasture for sheep. Per lb., 40c.

JAPAN CLOVER.—A low perennial of spreading habit, and adapted to withstand excessive drought. It makes a fair hay and stock eat it readily when green. It flourishes on the poorest soil in the Southern States. Sow fifteen pounds per acre. Per lb., 40c.; not prepaid, 10 lbs., \$3.25.

BERMUDA GRASS.—This plant has long been naturalized in the Southern States. It is a tender, delicate grass, growing over and binding the most arid and loose land, and grows luxuriantly in every kind of soil; very valuable for pasture, as well as for hay crop; time of sowing, April to June. Two to three pounds will sow one acre; seed very scarce and difficult to obtain. Per oz., 25c.; lb., \$3.00.

TEXAS BLUE GRASS.—The Texas Blue Grass grows on the roadsides, by fences and hedges; shade does not hurt it any more than Orchard Grass. It stands the hot and dry summers of the South very well; better than any other grass. Seed very scarce and difficult to obtain, and cannot be separated from the chaff. Per oz., 40c.; lb., \$5.00.

JOHNSON GRASS.—It is a good grass for both grazing and making hay; belongs to the Sorghums, its botanical name being *Sorghum Halapense*. A perennial, a rapid grower, long, cane-like roots; the leaf, stalk and panicle of this grass resembling those of other Sorghums. It grows on any land where corn will grow, and, like corn, will bear heavy manuring, yielding richly in rich ground. In fact, the richer the land, the better the crop. One bushel will sow an acre. We do not recommend it north of CORN BELT 75° (see our corn belt map). Per lb., 35c.; peck, \$1.00; bu. (25 lbs.), \$3.50.

TEOSINTE.—Recommended as the most prolific forage plant yet introduced. In appearance somewhat resembles Corn, but the leaves are much longer and broader. The stalk, containing much saccharine matter, is very nutritious. It can be cut several times during the season, yielding enormously. If allowed to grow without cutting, will attain a height of twelve to fifteen feet. One seed will sometimes produce twenty to sixty stalks or shoots. It was introduced from a tropical country, and the warmer the climate the better it yields. Should not be planted until the soil is perfectly warm in Spring. Requires about four pounds of seed per acre. Plant in drills three feet apart, and two or three seeds every twelve inches in drill. Per pkt., 10c.; oz., 25c.; ¼ lb., 50c.; lb., \$1.75.

This so-called "Hybrid Millet" we send out on the recommendation of a Minnesota Seed House and give their description below; our trial shows it to be allied to the Sorghum family, but it is without doubt an excellent forage plant;

"The combination was brought about by one of Minnesota's experimental farmers, who is largely engaged in growing seeds for us. This is the fourth year of its growth. The average length of heads is about fifteen inches; height from ground to top of head six feet. The yield is enormous. The stalk at butt measures about one-fourth of an inch, full of broad leaves, resembling those of corn, yielding from ten to twelve tons of fodder per acre, which is as easily cured as clover hay. A splendid ensilage plant the same as other millets—the advantage being that

it will yield, under equal circumstances, three times as much seed and twice as much fodder per acre. Golden Wonder Millet can be grown and matured in high latitudes where corn will not ripen. It should be sown or planted about June 1st, and will then do to harvest after the wheat crop has been secured. To get the best results for seed purposes, it should be planted and cultivated like corn, in rows three feet apart, and from twenty inches to two feet apart in the rows, planting from five to seven seeds in the hill. If for fodder, sow on rich ground, and cut before the seed is ripe. One of the best crops known for cutting and feeding green for silage purposes, since its yield is large, its leaves juicy and tender, and much relished by milch cows and other stock, making a palatable change from hay." Price, prepaid, pkt., 15c.; ¼ lb., 35c.; ½ lb., 60c.; lb., \$1.00.

VAUGHAN'S SEED CORN.

EARS OF CORN.—We undertook when commencing our seed corn business to supply every variety in the ear, as we were then fully convinced, as we still are, that it is **THE ONLY SAFE PLAN.** WE HAVE KEPT THIS PLAN AND WE SHALL KEEP IT, believing that it is bound to win. We have great faith in it, from the fact that we have never yet found a corn grower who did not prefer to buy his seed in this condition. We believe the time will come when every dealer in seed corn must **SHOW IT AS IT GROWS** and not shelled without the slightest chance to judge of the crop.

It is no easy matter to handle the corn in this manner, as it demands extra work and care in selecting, curing, storing and in shipping, but the result must be from 30 to 50 per cent. of gain to the planter. It can readily be seen that bushels of selected ears of seventy pounds can not be offered at the price of common shelled seed in which every nubbin or half-car, if sound, has been run through the sheller. Will our friends please consider this matter when comparing our prices with shelled seed at low prices. Buy your Corn on the ear, see what you get, and plant what you like.

WHY AND WHERE TO BUY.—It will pay you to buy the best. Because the cost per acre is but a few cents more than ordinary Corn prices. Our list includes those adapted to every section from Dakota to Arkansas. We have tested the varieties named, and know they will mature where recommended. Every variety has been selected with reference to most valuable characteristics—earliness, depth of grain, color of cob, prolific habit, or other desirable qualities. The descriptions given show exactly the **BELT** in which each variety can be matured. Do not believe that any one sort, however desirable, is suitable for any large area of country. Our work of past seasons has placed us in the best position we have yet held, to fill all orders carefully, intelligently and with the **BEST SEED OF THE RIGHT SORT TO MATURE** with you—for every planter should plant the very **LARGEST KIND WHICH HE IS REASONABLY SURE TO MATURE.**

By **FREIGHT** we usually ship in gunny sacks containing one bushel each. No charge for sacks or delivery to depot.

TO AVOID DELAY.—When time is short, late in the season, customers would do well to give at bottom of their order, their **SECOND CHOICE**, in case the sort they want is sold out, or state if we may send the variety best adapted or return the money.

Our **CORN BELT** map shows the central portion of the United States divided into sections about 100 miles wide. By referring to such Belts we can best show our customers where the kinds offered will mature. It will be readily noticed that these lines of equal heat during corn growing weather by no means correspond with the parallels of latitude, as many suppose. This plan has proved very satisfactory, and must come into general use.

NORTH STAR YELLOW DENT, No. 21.

(See illustration above.)

It is a bright yellow Dent, 12 to 16 rows, with deep grain and small red cob. It ripens in about one hundred days, and has been carefully improved with a view to keep the ears of the largest possible size, and yet fully mature the crop in good season throughout Southern Minnesota and Dakota. Our stock for 1889 is grown from seed from St. Paul in 1886, and has been grown three years in **CORN BELT 71°**; it has been carefully cured by fire heat. We believe it suitable for an early variety south of belt 71°; and for a general crop in that belt and northward. Our grower writes that it excelled all neighborhood seed in yield. Price, 6 ears, 25c.; peck, 50c.; bush., \$1.75; 5 bush., \$7.50; 10 bush., \$13.50.

CHESTER COUNTY MAMMOTH, No. 17.

One of the best, largest growing and most prolific Dents for its section (Belt 73°). Rows 16 to 24 in number with deep grain; cob medium. Weight 58 pounds per measured bushel and will yield, under good cultivation, 100 to 130 bushels of shelled corn to the acre. Part of our stock of seed of this has been grown in Central Iowa, and part in Penn. as usual. Our Chester County strain of this well known sort is smaller, earlier, shorter in stalk than most Chester County corn. It will certainly please our customers in **CORN BELT 73°** temperature and with a fair season, farther north. Price, 6 ears for 25c.; peck, 65c.; bush., \$2.00; 5 bush., \$9.00.

FOR GRINDING CORN, use the No. 0, Family Grist Mill. Weight 30 lbs., diameter of wheel 20 inches. Best of the sort. Each, \$5.00.

PRIDE OF THE NORTH, SECTION OF EAR.

PRIDE OF THE NORTH, No. 23.

This variety was originated with Mr. Goddard in Northern Iowa, a practical farmer and seed grower of thirty years experience. When this corn was first sent out, it was not true to type but our stock having been carefully selected shows a great improvement over the first, and is now **ONE-HALF LARGER** than usual stock of this. Our stock this season has been grown near Niles, Mich., and is thoroughly dry. It is very early, and is generally ripe and fully matured in 90 days of good corn weather. It yields well and has a deep, oily kernel and a small cob. It weighs sixty pounds to the measured bushel, and has often but eight pounds of cobs in a seventy pound bushel of ears. It is generally a safe sort to plant in **CORN BELT 71°**. Price, 6 ears for 25c.; peck, 50c.; bush., \$1.75; 5 bush., \$7.50.

PARRISH WHITE DENT, No. 15.

(For **CORN BELT 76° 30'**.) The most thoroughbred and handsomest White Dent in America. We will refund money and pay freight both ways to any who are not pleased with the appearance of this sort. We do not recommend it to mature North of Springfield, Ill., but it is a splendid sort for fodder anywhere. Ear 8 to 9 inches long, 2½ inches in diameter, 16 to 18 rowed. Nearly all deep red cob. Price, selected ears, peck, 75c.; bush., \$2.75. Shelled, the **BEST IN THE WORLD** for fodder and ensilage, bush., \$2.00. Write for rates on larger lots.

Dec. 3, '88.—The North Star Corn is all you claim for it, viz. early, prolific and reliable. 14 acres planted May 19th, and killed by frost Sept. 6th, was fully matured and yields 50 bu. per acre and every ear sound and hard. 5 acres planted May 9th, yields 65 bu. per acre and was matured and in the shock by Sept. 1st.
D. S. McKINSTRY.

DENT CORN. (CONTINUED.)

EDMUNDS' PREMIUM DENT.—Quite distinct in type. An early yellow Dent suitable for CORN BELT 71°. Much like our North Star and Improved Pride of the North in season, but a trifle larger in size, ear rather longer than North Star. We have had a stock grown in Indiana and Wisconsin; both are fire-dried and can be supplied to our customers as follows: Peck, 60c.; bush., \$1.85; 5 bush., \$7.50.

CRANBERRY WHITE DENT, No. 41.—(For CORN BELT 74°).—A White Dent with pinkish tint on the upper half of the ears, is a favorite in many parts of Illinois and Indiana; yields remarkably well, is an excellent corn for feeding purposes, and a very handsome, distinct sort. Price, per peck, 60c.; bush., \$2.00.

WOODWORTH'S YELLOW DENT.

—This is a Yellow Dent from Southern Wisconsin. It makes a vigorous growth from the start. Stalks about eight feet, with few suckers, ears borne about four feet from the ground. Ears 16 to 24 rows, occasionally 28 to 30, regular, retaining size well to tip, 9 to 10 inches long. Red cob, very firm grain though not so deep as some smaller corns; shrinking comparatively little in curing. On good ground, with

good culture, and a fairly good corn season, it is safe for (60) sixty bushels of ripe corn in (100) one hundred days from planting. It is not yet entirely "fixed," occasional stalks showing more or less pronounced "Chester County" characteristics. Our seed is fire dried. It is the largest Corn we ever saw grown in Wisconsin, for CORN BELT 71°. Selected ears, 6 for 25c.; pk., 60c.; bu., \$1.75.

LEAMING YELLOW DENT, No. 9.—We do not consider it an EXTRA EARLY CORN, as some claim it to be. One hundred and ten days of an average season in CORN BELT (71°), and one hundred and twenty days in BELT 68°30' would probably mature this fine variety; yields well on moderately rich soil. Our experience with the Pennsylvania grown seed is that it is too late for Northern Illinois and Iowa. Our seed is probably as fair a type of this sort as can be found. Price, selected ears, 6 for 25c.; peck, 50c.; bush., \$1.85; 5 bush., \$8.50.

CALICO DENT.—Known as "Bloody Butcher" and "Strawberry." Kernels yellow, striped and blotched with red. Much liked by many Western farmers who find it very prolific. We have a selection of it which has been very carefully grown and selected in Northern Illinois and will mature at the south line of CORN BELT 71° and all southern parallels. Many of our stock-feeding customers in Central Illinois and like BELTS will find our selected strain of this very prolific and desirable for early feed. Price, selected ears, peck, 60c.; bush., \$1.75; 3 bush., \$4.75.

HICKORY KING.—A White Dent of Southern origin. We do not recommend it North of CORN BELT 74°. It is highly praised by Philadelphia Seedsmen, but it must be remembered that Philadelphia is in BELT 74° and that the Corn originated south of that. It is still within the memory of men living, when Philadelphia Seedsmen recommended large growing Dents as suitable for all parts of the country. Our Corn Belt Map, based on lines of similar summer heat has taught them something, though loss of confidence by their customers has taught them more. Price, 6 ears 25c.; peck, 65c.; bush., \$1.85.

WISCONSIN YELLOW DENT.—Of bright yellow color and with many rows, many of the ears averaging 22 rows and upward. Kernels of good depth; cob red; average weight of ears about 9 to 10 ounces. It matured the season of 1883 north of latitude 43°, which proves it a most desirable type for a very large belt of country where most corn failed. It is in every way one of the most desirable kinds for CORN BELT 71°, and even somewhat North of that. It generally exceeds in size the North Star sort, which it somewhat resembles. This variety has been grown in Central Wisconsin for thirty years, and has been brought to its present nearly perfect type by careful selection. Our stock has been grown in Southern Wisconsin. Price, peck, 60c.; bush., \$1.85; 5 bush., \$8.50.

WISCONSIN WHITE DENT.—Very similar to our Wisconsin Yellow, except in color. It is not a pure white, the sides of the grains are tinted yellow and the tips of them reddish, though the top of the kernel is pure white. It will ripen anywhere in CORN BELT 71° and is the best very early White Dent we have seen. Price, 6 selected ears, 25c.; peck, 60c.; bush., \$2.25; 3 bush., \$6.00.

BRAZILIAN FLOUR CORN.—A White variety of Maize from Georgia; ears 7 to 9 inches long, is said to make as fine and desirable a flower as wheat. The ears are good for roasting, and it makes a good fodder in the North where it will not mature a crop. We can not recommend it to ripen North of CORN BELT 75°, though it will make good fodder and is worth trying. Large pkt., 10c.; lb., postpaid, 30c.; not prepaid, qt., 30c.; peck, 85c.

Prof. Henry, of Wisconsin Experiment Station, finds Pride of the North a superior early variety for that State.

CHESTER COUNTY MAMMOTH.

FLINT © CORN:-

SMUT NOSE OR RED BLAZED.—(See cut). Well known and quite popular variety of 8-rowed Yellow Flint, much grown in in CORN BELT 68°30'. The tip is tinted with a dull brownish-red; yields well and is a valuable and safe sort for a main crop in CORN BELT above named—Central Wisconsin and Michigan, and like parallels. Our stock has been grown and carefully selected in the extreme northern part of Michigan. For the EARLIEST EIGHT-ROWED FLINT try "Smut Nose." Price, selected ears, 6 for 25c.; peck, 75c.; bushel \$2.00.

MANDAN INDIAN.—A mottled Flint, curious as one of the oldest types, will mature in CORN BELT 75°; should be in every corn collection. Price, per ear, 5c.; packet, postpaid, 10c.; per lb., 25c.

WISCONSIN WHITE FLINT.—A smoky White Flint of good size, matures in CORN BELT 71°. 6 ears, 25c.; peck, 60c.; bush., \$2.25.

LONGFELLOW, FLINT.—This handsome yellow variety can hardly be excelled by any of its class and size, having been carefully selected

for many years for long handsome ears and small cob. It frequently bears two ears. We have secured a very select strain of this from a reliable Connecticut seed grower, and offer SHELLED CORN as follows: Per pkt., 10c.; quart, 25c.; peck, 60c.; bush., \$2.00; 2½ bush., \$4.50.

REDDISH FLINT, KING PHILLIP, No. 22.—(For CORN BELT 71° AND NORTH).—One of the oldest and best known of the Flint varieties. We have again, as usual, thorough-bred Eastern-grown seed of this kind; large size, selected ears. Pkt., 10c.; selected ears, 25c.; 100 ears, \$2.00; bush., SHELLED, \$2.25.

GOLDEN DEW DROP.—A handsome Connecticut grown, bright yellow 8-rowed variety of rich color and prolific habit, suitable for CORN BELT, 71°; price same as King Phillip.

TOP OVER CORN.—This new variety is a remarkably early corn with the smallest cob we have ever seen, so small that it has also been called Pipe-Stem corn. Price, per pkt., 10c.; 6 ears, 25c.

JAPANESE STRIPED MAIZE.—Foliage striped with white. Grows six to eight feet high, and is quite a handsome foliage plant for lawns and borders; much used in parks. Pkt., 10c.

SEED CORN, FOR FAIRS AND EXHIBITIONS.

Our Premium Experimental Collection. In response to a very general demand from many customers who desire seeds for a small plot of many varieties of Corn for experiment, we have secured a large number of varieties which offer in the following collections.

Each packet contains at least 150 seeds or enough for 35 hills.

One Large packet each as follows.
YELLOW DENTS: North Star, Pride of the North, Chester County Mammoth, Edmunds, Leaming, King of the Earlies.

WHITE DENTS: Parrish White, Champion Pearl, Wisconsin White, Cranberry, Hickory King.

FLINTS: Top Over, Longfellow (very long), Houghton Farm, Waushakum.

POP CORNS: 6 kinds separate.

ODD KINDS: Striped Dent, Black Dent, Red Dent, Black Flint.

The package will contain at least 25 kinds some one or two sorts occasionally being exhausted.

SWEET FODDER CORN.

The dairy farmers of the North West have realized more than ever this season the value of SWEET CORN for fodder purposes. They have climbed

SMUT NOSE.

over each other the past two years in their haste to purchase the over-grown White Corn from Va. and other Southern States, only to learn that Sweet Corn to be had much nearer home and at about the same prices, had nearly double the value for fodder purposes. We have advocated the use of Sweet Corn for the past two years. We have a larger stock than ever and at very low rates. We have good seed of the large growing, leafy sorts, and offer it as follows: per bush., \$1.60; per bag of 2 bush., \$3.00; 6 bush., \$8.00 (bags incl.)

WISCONSIN YELLOW DENT.

• TREE SEEDS •

POUND LOTS AND LESS FREE BY MAIL.

HOW TO GROW THEM.

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

Keep the young plants well weeded, and allow them to remain from one to two years before transplanting.

ARBOR VITAE, AMERICAN.—A small evergreen, excellent for hedges as wind-break; wood is very durable. Pkt. 10c.; oz., 40c.

APPLE SEED.—May be planted in early spring. The seed must first be mixed with damp sand and frozen, after which care must be taken that they do not become dry before planting. The soil should be deep, rich and well prepared, and the seed sown in rows two feet apart. 12,000 seeds in a pound. (Bushel, 40 lbs.) Price, lb., 40c.; 10 lb., \$2.00; bush., \$6.00.

ASH, WHITE, (Fraxinus Americana).—This is one of the most valuable varieties for forest planting. It is adapted to a wide range of soil and climate. It is an extremely rapid grower, often attaining a growth of six feet in a single season. Its lumber brings a high price in the market, and is becoming very scarce. It is one of the earliest varieties to transplant or grow from seed, requiring no more care or skill than the ordinary crop of white beans or Indian corn, with the exception that the seed usually lies dormant the first season, but is sure to grow the next year if the ground is not disturbed. Price, per oz., 10c.; lb., 40c.; 5 lbs., not prepaid, \$1.00.

APRICOT, RUSSIAN (Prunus Siberica).—The hardiest of the Apricots. In its native land it flourishes as far North as the mountains of Dahuria, in Siberia. It was brought to the United States about 1875 by the Russian Mennonites, and was extensively planted by them in their Kansas and Nebraska settlements. Fruit medium size and of the best quality. Perfectly hardy and a valuable tree. Price, per oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

WHITE BIRCH.—A very ornamental tree, succeeding best in a moist soil and climate. Sow in new ground and do not cover, but press in the soil. Price, per pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

BOX ELDER (Acer negundo).—Grows very rapidly. It is claimed that it will produce the largest amount of fuel in the shortest time of any of our hardy trees. Soak the seeds before planting. A bushel contains 10,000 seeds. 1888 crop. (Bush., 10 lbs.) Price, per oz., 10c.; lb., 35c.; 10 lbs., \$2.75.

CATALPA SPECIOSA.—The hardy Western variety, now being very largely planted. It is of very rapid growth, making one of the best timber trees. We recommend it as far North as TEMPERATURE BELT 75°. (See our Corn Map.) Sow thickly in rows about four feet apart, in April or May, and cover to the depth of one-half inch, and keep free from weeds. Transplant to their permanent places the next spring, and cultivate for two seasons. A pound contains 16,000 to 22,000 seeds. New crop seed, just gathered, which may be relied on as the TRUE and GENUINE HARDY VARIETY. Price, per oz., 10c.; ¼ lb., 30c.; lb., \$1.15; not prepaid, 5 lbs., \$4.50.

CATALPA, Teas' Japanese Hybrid.—The most beautiful of all the Catalpas. Its massive and gigantic proportions resemble the productions of the tropics, while it has proven perfectly hardy throughout the West. Very profuse bloomer—very rapid grower. Try it south of CORN BELT 73°. (See Map.) 4,000 seeds in an ounce. Price, per pkt., 10c.; oz., 40c.; ¼ lb., \$1.25.

CEDAR, RED (Juniperus Virginiana).—Grown in all sections, very valuable timber, a fine ornamental tree. Stands dry, hot winds, and for wind-breaks around the farm house and stock yards, as well as fence posts, is invaluable; also being symmetrical in growth and readily shaped with the shears, it is one of the most beautiful yard trees. After properly planting out, the Red Cedar requires less care and will stand more neglect than any other evergreen. Price, per pkt., 5c.; oz., 15c.; ¼ lb., 40c.; lb., \$1.25.

BLACK LOCUST.—Makes rapid growth, of hard durable timber. Price, per pkt., 5c.; oz., 10c.; ¼ lb., 35c.; lb., \$1.15.

YELLOW LOCUST.—Makes rapid growth of hard and durable timber. Succeeds well in many sections and fails in others. Worthy a trial where it has not been tested. 30,000 seeds in a pound. Price, per oz., 10c.; ¼ lb., 35c.; lb., \$1.15; not prepaid, 5 lbs., \$3.75.

HONEY LOCUST.—Of rapid growth and valuable timber. 2,300 seeds in a pound. Price, per pkt., 5c.; ¼ lb., 25c.; lb., 75c.

RUSSIAN MULBERRY.—The variety planted for silk culture, easily grown, hardy, can be trimmed to a fine hedge; fruit quite palatable. Tree makes fence posts in five years and fine lumber. Price, per pkt., 10c.; oz., 35c.; ¼ lb., \$1.25.

SUGAR MAPLE.—The well known variety. Price, per pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.10.

TREE SEEDS—CONTINUED.

MAPLE, OREGON MAMMOTH (Acer macrophyllum).—This is the large Mammoth-leaved Maple, peculiar to the northwest coast. According to Mr. Douglas, an eminent naturalist, it is one of the most graceful trees in the country; varying from 40 to 90 feet in height and 16 feet in circumference. Its leaves are often twenty inches in breadth. While it is a species of Maple peculiar to the northern climate of Oregon, it has been fully tested in other States and countries, and found to grow rapidly in either cold or warm, dry or damp climates. As a shade tree it has no rival. The lumber is similar to what they call in the East "Bird's Eye," and is used as most valuable furniture lumber, portions cut into veneering being an important article of export. Pound contains 7,000 seeds. Price, per pkt. 10c.; oz., 20c.; ¼ lb., 50c.; lb., \$1.50.

DOUGLAS SPRUCE.—One of finest evergreens. Pkt., 10c.; oz., 30c.

NORWAY SPRUCE.—A very hardy variety, easily grown from the seed; good timber and a close wind-break; valuable for ornamental purposes. One pound contains 20,000 seeds. Price, oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

OSAGE ORANGE.—Best of all hedge plants. A native of the South and West, but very hardy throughout the country. The timber is extremely hard and durable. The seeds, which germinate slowly, should be sprouted first by soaking several days in warm water, afterward keeping warm and moist until ready to plant. Plant in drills. A pound of seed should furnish 5,000 plants. (Bush. 33 lbs.) Oz., 10c.; ¼ lb., 20c.; lb., 50c.; peck, \$1.65.

FRUIT SEEDS.—Currant, Strawberry, Raspberry, Gooseberry and Blackberry. each, pkt., 10c.; ½ oz., 35c.

POP CORNS FOR THE BOYS.

Our list forms a very interesting collection for Fairs or Exhibitions. Price, for any kind except noted otherwise, postpaid, pkt., 5c.; ½ lb., 20c.; lb., 35c.; on larger lots than pounds price does not include prepayment.

ILLINOIS SNOWBALL.—Introduced by us in 1885. A cross of the Common Rice with the White Pearl. The ears are double the size of the common variety; it is exceedingly prolific, having yielded 65 bushels on ½ acre. Is a strong, stocky grower, but quite dwarf, seldom exceeding 5 feet in height; bears two three very fine heavy ears. Its popping quality is excellent.

WHITE RICE.—A very fine white variety, ears 4 to 5 inches in length and 1 to 1½ in diameter. Kernel pointed. Especially salable among the retail grocers in Chicago. 10 lbs., 60c.

RED RICE.—An excellent popping variety of handsome appearance; ears 4 to 6 inches long; kernel pointed; color dark red. 10 lbs., 60c.

GOLDEN RICE.—The largest of the rice varieties, the ears being from 5 to 7 inches long; kernel large, of a clear golden color. 1 lb., 10c.; 10 lbs., 60c.

WISCONSIN EIGHT ROWED.—The standard variety for market. Is used largely by pop corn manufacturers. Grain is broad, smooth, and pops out large. Yields well, and can be hnsked rapidly. 10 lbs., 60c.

PREMIUM PEARL.—Took first premium at Chicago Corn Show in 1886. Kernels pearly white; ears 6 to eight inches long and very handsome with 12 to 16 rows; prolific, bearing 3 to 5 ears on a stalk which grows 6 to 7 feet high, of medium early maturity and a fine popper.

CALIFORNIA GOLDEN POP.—Samuel Wilson, who furnishes us the corn thus describes it: "The most curious and beautiful variety of corn we have ever seen. The stalk grows from 3½ to 4 feet high; bearing numerous very small miniature ears, from 2 to 3 inches in length, perfect in form and shape. Deep pointed grains of a fine, rich golden color. Its popping qualities are splendid and much superior to any pop corn we have ever tried. It is also valuable and highly esteemed for mantel ornaments and Christmas decorations, as the small, delicate, beautiful ears, with their shining golden grains, among everlasting, dried grasses, or other holiday decorations, has a remarkably pleasing and attractive appearance. Postpaid, pkt., 10c.; ½ lb., 35c.; lb., 60c.

STRIPED RICE.—Quite a distinct cross of the red and white rice sent out last season by an Iowa seedsman, who claims to have carefully selected it for five years. In appearance it is quite striking. Postpaid, pkt., 10c.; ½ lb., 25c.; lb., 40c.

MAPLEDALE PROLIFIC.—(See cut.) Sent us by an Iowa seedsman who backs up this most prolific illustration by very strong affidavits. If it is only half as prolific as they say, it is a big thing. We think it worthy a trial. Pkt., 10c., 3 pkts., 25c.; ½ lb., 50c., postpaid.

QUEEN'S GOLDEN.—One of the largest, kernels yellow, much is said for it by the introducer Mr. Queens, who claims it to be very large and tender. Price, lb., 25c.; not prepaid, 5 lbs., 60c.; 10 lbs., \$1.00.

ILLINOIS SNOWBALL.

MAPLEDALE PROLIFIC.

TWO GOOD WINTER WHEATS.

There is a growing demand for Winter Wheat, and we predict double the acreage in 1889 over that of 1888. Write us for prices, Aug. 1st, 1889.

MEDITERRANEAN HYBRID, or MICHIGAN BRONZE.—One of the best for main crop. Introduced six years ago and now a standard.

RELIABLE.—Sent us from Eastern Pennsylvania the past season. We believe it will prove all that its name implies. We shall know all about it by August next, when we can name prices.

• THE JAPANESE BUCKWHEAT. •

We hear good reports from this and the best authorities find it an improvement over the older kinds. Samuel Wilson, says: "On one single stalk we counted 560 plump grains. Our own experience has convinced us that the Japanese Buckwheat will yield fully twice as much on the same ground as any other, that it ripens one week to 10 days earlier, stands up better, and makes better flour than any other kind of Buckwheat. Price, lb., 30c.; ½ peck, 50c.; peck, 90c.; bush., \$3.00; 2 bush. bag, \$5.50.

VETCHES—Spring.—Sown broadcast like wheat or barley, and sometimes mixed with oats for soiling. Used in France and Canada as a substitute for peas. Also ground up into flour, after which it is mixed with wheat flour for making bread. Per qt., 40c.; bu., \$3.50.

RAMIE—Silver China Grass. (*Urtica nivea*.) This is the variety now being extensively planted in the South for its fibre. Directions for growing sent with the seed. Pkt., 25c.; oz., 75c.; lb., \$9.00.

SUGAR CANE—Early Amber.—The standard variety for the North. We have it grown in Illinois and Kansas; customers will please state which they prefer. Price, per lb., by mail, 20c.; by express, 10 lbs., 60c.; 50 lbs., \$2.00; 100 lbs., \$3.25.

SUNFLOWER—Mammoth Russian.—For poultry, for stock and for fuel. Grows easily in almost any kind of soil. Four quarts plant an acre. Every farmer should plant a patch. Our seed is saved from selected heads. Pkt., 5c.; lb., postpaid, 30c.; 10 lbs., not prepaid, \$1.50.

BARLEY—Manshury—Dakota Grown.—A six-rowed barley with very long heads, well filled and heavy; straw bright and strong; a little later than common six-rowed barley. Price, peck, 45c.; bushel (48 lbs.), \$1.65.

BLACK BARLEY.—Per pkt., 10c.; per lb., postpaid, 40c.

FLAX SEED—Russian.—We have some very choice seed of this, much superior in every way to common Flax. It will increase the yield and add to the value of the product. We guarantee our seed to be strictly clean. Pkt., 10c.; lb., 25c.; not prepaid, peck, 75c.; bushel, \$2.25.

BROOM CORN—Improved Evergreen.—The improved Evergreen Broom corn grows about 8 to 10 feet high, stands up well, and is free from crooked brush. Its greatest value to the grower is the fact that it will not get red in the field before it is cut, but is strictly a green variety of brush and will always command highest price. (Bush, 46 lbs.) Price, lb., 25c.; not prepaid, ½ pk., 40c.; pk., 75c.; bu., \$2.25.

RURAL NEW YORKER CROSSBRED AND HYBRID WHEATS.—6 pkts. all different, about 25 grains in each, postpaid for \$1.00.

Portage, Wis., 11, 15, 58.—I like the Clarke's No. 2 Root Cutter very much. Mine has cut from 500 to 2500 bushels every season since purchased and is as good as new.
H. L. MERRELL.

VAUGHAN'S FARM GRAINS.

The prices for single pounds include postage; deduct 8c. if to go at your expense.

CHOICE SEED OATS.

The kinds offered here we think well worthy the attention of those who are interested in this crop. The American grown sorts are offered at very reasonable prices which should justify a change of seed wherever needed.

OATS—GIANT YELLOW FRENCH.

Our Paris correspondents, one of the largest seed houses in the world, called our attention to this new Yellow Oat and recommended it so highly that we imported a thousand pounds for trial. They say: "It has been selected in our grounds since 1880 and may be recommended with confidence as the most prolific in existence. It is a most wonderful hybrid of the Yellow Flanders with our Hungarian Oat; is extremely hardy, makes a strong stool and grows with a vigor and rapidity not equaled by any other sort. The straw, which is heavy and strong, never lodges. The heads are compact, very long and often over 11 inches in length. The grain is heavy, large, plump and entirely similar to that of the Yellow Flanders Oats or the Saline Oats which have been so very popular for years in France." Price, prepaid, ¼ lb., 20c.; lb., 50c.; not prepaid, 3 lbs., \$1.00; 10 lbs. \$2.50.

WHITE BELGIAN.—We have our stock of this standard Oat from one of the best posted growers of farm grain in the Northern part of Illinois, and he says: "The Belgian Oat is as good as any Oat that is raised, it stands from 4 to 5 feet in height, with stiff straw, and yielded 26 bags per acre, 3 bushels to the bag." If you want some new seed oats here is a chance. Price, peck, 40c.; bush., \$1.25; 2½ bush., \$2.50.

BADGER QUEEN.—A Wisconsin variety that has received high praise for two years past. We have our supply direct from the grower who named it, and quote: Lb., 15c.; peck, 40c.; bush., \$1.25; 2½ bush., \$2.90.

RACE HORSE, (also called Clydesdale.)—The handsomest Oat we have ever seen. Was originated by careful selection by Oakshott, the famous English seed house, and certainly shows to be remarkably distinct. A heavy cropper, two weeks earlier than most sorts, with very plump grains. We have had good reports from those who bought our imported stock for two years past. We offer this year Illinois grown seed. Per lb., 25c.; peck, 40c.; bush., \$1.15; 2½ bush., \$2.50.

EGYPTIAN OATS.—Introduced from Canada; stiff straw will often weigh 48 pounds to the bushel. Has given good satisfaction with us for the two past seasons. We offer it at prices which should justify any farmer in changing his seed. Lb., 25c.; peck, 35c.; bush., \$1.25; 5 bush., \$5.00.

AMERICAN BANNER OATS.—The grain is large, white and plump; ripens early, has stiff straw of good strength. You cannot go far wrong in giving it a trial. We can not promise it will yield ten times more than any other known variety. Price, postpaid, per lb., 25c.; not prepaid, peck, 50c.; bush., \$1.75; 2½ bush., \$3.50.

CANADIAN BLACK OATS.—We have a limited quantity of this variety. Price, peck, 40c.; bushel, \$1.25 2½ bushels, \$2.50.

WELCOME.—Now widely known and extensively grown. They have proved very productive and are a very heavy Oat out-weighting nearly all standard sorts. The introducer claims the large yield is because of the wonderful stooling, often 40 stalks from a single grain. The low price at which we are able to offer these will give every one an opportunity for a change of seed at very trifling cost. Genuine seed supplied us by Mr. Burpee this season. Lb., 25c.; pk., 35c.; hu., (32 lbs.), \$1.25; 2½ bu., \$3.10.

NEW JAPANESE BUCKWHEAT.

GEM
OF THE
GARDEN.

GEM CULTIVATOR—SINGLE WHEEL—\$5.00.

We are HEADQUARTERS
for all GARDEN TOOLS.

Double and Single Wheel Combined, \$7.00.

The working parts of the Single Wheel "GEM" are: 2 Scuffle or Cutting Blades, one 4½, and one 9 inches wide, 2 Plows, right and left hand; 5 Stirring Teeth; all made of best steel. The wheels and handles of the "GEM" are both adjustable in height, while the frame is so slotted that the hoes, teeth and plows can be set in almost any position or angle. The Scuffle Hoe makes 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 enough to cover small plants. The hoes, of thin steel, and presenting nearly a straight line to the work, avoid the "dodging" so common to tools of this kind. Price of single-wheel machine with all parts as shown in engraving, \$5.00.

This illustration shows, in addition to the Single Wheel Machine, sold at \$5.00, the New Double Wheel Attachment and two extra Steel Blades which we furnish with the Single Wheel, including all parts shown in this engraving for \$7.00. The Double Wheel attachment, with these extra Blades, is of great service in working both sides of the rows among young plants.

Ten thousand of these splendid tools have been sold during the past six years, to the greatest satisfaction of the buyers. Many have said they would not be without it for double the cost, and all agree that it is by far the Cheapest and Best article of the kind made. List of testimonials from nearly all the States sent on application. It is sold with the privilege of returning if not entirely satisfactory. The unparalleled success of this genuine

"GEM OF THE GARDEN"

has led competitors to make various imitations of it, hoping for a share of public favor. These have been given a variety of names similar to the "Gem," but none compare with it yet, in the variety and thoroughness of work and cheapness.

It does all kinds of garden work. We have cut all margins to the lowest notch in making this tool; we make it in large quantities, too, and our competitors find it impossible to give a machine capable of so much work for that money. Several large seed houses said they would be very glad to sell it, but they required larger profits than could be made on this tool. Thus we lose the benefit of the advertisement in their catalogues, but we have faith that a tool whose Only Fault is that it is sold Too Near the Actual Cost of production, will in the end surely find its way to every gardener. Tell your neighbors about it. Get up clubs; 20 per cent. discount on lots of six. Eyes are cast in the wheel arms for attaching ropes to pull the machine when desired. If you decide that you want this Tool, do not be put off with any excuse whatever, that some other kind is equally good. Insist on this tool and get it; ask your dealer why he does not keep it. Write us for nearest place where it can be had, and we will see that you get it for a very small freight rate.

Beware of imitations. A fraudulent imitation has been placed on the market in Connecticut, poorly made and inferior in every way. Suspect it if offered lower in price and of poor finish. If in doubt write us for nearest point where the genuine can be had.

OUT OF 10,000 MACHINES SOLD, NOT FIVE HAVE BEEN RETURNED. No better testimonial could be given.

The Gem can be had in all Eastern Cities, and in the West, at Kansas City, St. Louis, Louisville, Omaha, Minneapolis, La Crosse, Milwaukee, Leavenworth, and other points. We ship them everywhere.

THE \$5.00 "GEM" with SEED DRILLS.

A. H. Matthews' New Drill.....	\$12.50	for the two machines.
A. H. Matthews' Little Gem Drill.....	10.00	" " "
Matthews Garden Drill.....	12.50	" " "
New Model Drill.....	12.50	" " "
Comstock Garden Drill.....	11.00	" " "
Planet, Jr., Drill No. 2.....	12.25	" " "

It "Takes" with our Customers. Sold Several Hundred.—"We have used the 'Gem' Cultivator in our gardens with satisfaction. It is light (an important item), and does the various work of Weeding, Cultivating, Hilling, etc., efficiently. It 'TAKES' WITH OUR CUSTOMERS. WE SOLD SEVERAL HUNDRED last season, and could have disposed of more if prepared for the demand."

JAMES VICK, Rochester, N. Y.

LANARK, ILL., March 31, 1887.—I have now in use one of your Wilson Bone Mills, also your Gem of the Garden Double Wheel Hand Cultivators, they are both good, could not get along without either of them.

B. F. SWORD.

Most Complete Cultivator Yet Made.—"I bought the 'Gem' Cultivator on sight, especially for loosening a soil packed by a heavy rain, which it did in good shape. The plow for opening furrows, hilling beans, etc., works well. Light Draft. The boys call the 'Gem' a little DAISY. I consider it the most complete garden cultivator yet made."

J. S. GRAY, Minneapolis, Minn.

Pres. Hennepin Co. Farmers', Gardeners' and Fruit Growers Ass'n.

Worth a Cart Load of Others.—"The 'Gem' is the best thing out. I have several others, but would not give the 'Gem' for a cart load of them."

A. WHITCOMB, Lawrence, Kas.

Our sales of Garden Tools at wholesale and retail amounts to nearly one-third of our entire business; hence you may be assured of lowest rates and latest improvements in every tool you order. Do not purchase without writing us for prices, and if we cannot save you money by shipping from here, we will direct you to our nearest Agent, who can.

A. H. MATTHEWS' GARDEN DRILL

IMPROVED
FOR 1889.

"THE PERFECT DRILL."

This machine is the production of Mr. A. H. Matthews, who has been engaged since 1868 in the manufacture of garden drills, amounting to OVER ONE THOUSAND YEARLY, and is the result of all his own experience and of the experience of others who have tried all kinds. He has retained some features of the older drills which have proved to be good, and discarded their weak and defective points, substituting many new and valuable features, as shown below. Mr. Matthews personally manufactures this drill, for which we have the general agency for the United States and Canada, and his inspection insures perfect working of every drill sent out.

THE A. H. MATTHEWS' GARDEN DRILL

as improved for 1889 is shown in the new engraving herewith. It will be seen by the cut that the handles are now bolted to the frame of the machine and can be fixed at any height. This avoids the handle brackets which have formerly been too easily broken. The Drill has been further improved by a new steel DIAL GUAGE making holes for dropping the seed more exact and carefully regulated than ever.

This tool, already a standard, will now be found as nearly faultless as

a drill can be made. It has never been denied that as a seed drill the Matthews has no superior. The cardinal principles in its construction are used in every drill worth having, now in the market and the A. H. Matthews' Drill still has, what it has had for years, the most extended sale of any tool of its kind. Especial features of this Drill are, HORIZONTAL INDICATOR, with the name of each in plain sight and a perforated seed dial, with pointers showing holes to be used for each kind of seed. WROUGHT IRON MARKERS, of one piece, easily adjusted and arranged with sliding weight for marking and can be operated entirely by the foot. NEW SHUT-OFF ATTACHMENT. This connects a small slide beneath the hopper by a chain and ring along the handle to the hand of the operator; by this the dropping of seed can be instantly stopped. By dropping the ring the seed spout is again opened. ADJUSTABLE HANDLES to suit a boy or man. The dial can also be turned to shut off seed entirely. Among others the following seedsmen recommend and sell the A. H. Matthews' Drills: Messrs. Gregory, Dreer, Michel Plant & Seed Co., Northrup, Braslan & Goodwin Co., Henry Lee. Price, \$8.50.

A. H. MATTHEWS' GEM DRILL.

This is in most respects but a smaller pattern of the A. H. Matthews' Garden Drill and will sow all seeds with the same accuracy; but is not large enough for the coarser seeds, like beans, peas and corn. For the home garden and all other uses where the finer seeds are sown, such as turnips, onions, carrots, parsnip, beet, mangel, etc., the Gem Drill will make the furrow, drop and cover the seed and mark the next row as perfectly as any drill made, and at only about half the price. It is thoroughly made in every way. The Drill crated, including handles, weighs 20 pounds. It is warranted to give satisfaction and will last for several years. PRICE, \$6.00.

NEW MODEL SEED DRILL.

TRY THE LATEST AND BEST.

NEW PERFECT INDEX

ITS FEATURES. Regulation of Discharge.—Drills of similar construction are usually provided with a series of holes of varying sizes through which the seed is passed, which of course do not always give an opening of the exact size required. The operator is usually told, in substance, that "if one hole don't suit, try another." This adjustment in the MODEL is accomplished in a very simple and effective manner by use of a slide with a pear shaped opening passing under the bottom of the seed reservoir, which is provided with a perforation of similar shape, in a reversed position. This slide can be instantly adjusted to size indicated by Index, or to a hair breadth variation between—a vital point in a perfect seed drill. This **Index** or indicator is plain, convenient and reliable. It is placed in open sight, immediately under the eye of the operator, and can be quickly adjusted to the slightest variation desired. As the names of the principal seeds are plainly shown on the Index itself, it is not necessary to refer to any table of reference. **Cut-Off.**—The flow of seed can be instantly stopped by a swinging cut-off, conveniently operated by a cord and ring on handles. **Marker.**—Is simple, easily adjusted and firmly held. **Broad Wheel.**—The main wheel is of larger size and of unusual width, preventing its sinking into soft earth. **Covering Roller.**—It is attached by swinging frame, enabling operator to roll lightly or otherwise, by varying the pressure on handles. **Opening Plow.**—Is of steel, adjustable in depth.

EACH DRILL CRATED AND CAREFULLY PACKED FOR SHIPMENT. PACKED WEIGHT, ABOUT 40 LBS. PRICE, \$8.00.

NEW IRON FRAME CULTIVATOR HARROW.

This Harrow Cultivator we placed upon the market for the first time in 1887, and it has proved a general favorite. It has all the advantages of our former Expanding Harrow while its reversible diamond pointed teeth, about two inches wide, play havoc with weeds and mellow the soil. It has a light, open frame, more durable, and not so likely to clog as a wooden one, while each tooth, being secured to the frame by a steel clip, can, by the simple loosening and tightening of a nut, be adjusted in depth, reversed, taken out, sharpened and replaced without the old-time fashion of driving out, wedging up, getting loose and--swearing. Notice cut of adjustable clamps showing how teeth may be set at any angle or depth or reversed. For very close rows every other tooth can be very quickly removed. Price, \$6.00.

MATTHEWS' GARDEN CULTIVATOR.

A well made tool. Expanding frame, with five steel teeth. The cheapest machine of the kind we offer. Thoroughly well made, and will do splendid service. We bought a large stock last season, and offer them very low; each, \$3.50; three for \$10.00; weight, 35 pounds, crated, with handles attached.

MATTHEWS' COMBINED DRILL—Ames'.

Those who prefer a Drill and Cultivator combined, will find this a good one. Weight, 45 pounds. Price, \$12.00.

MATTHEWS' SEED DRILL, AMES' PATENT.

Round Seed Box; a well-known drill; in use for many years; much similar to our A. H. Matthews' Drill. Please give full name as above when ordering, to distinguish it from the latter. Weight, about 40 lbs. Price, \$9.00.

THE PLANET JR. GARDEN TOOLS—1889.

PLANET JUNIOR COMBINED DRILL.

OUR NET PRICE, - \$10.00
(LIST Price, \$12.00.)

The PLANET JR. GOODS are widely and favorably known everywhere, the Combined Planet Drill being the most popular combined machine in the market. The entire line is well made, handsomely finished, and their Cultivators are second in popularity only to the "GEM." Chicago is a great distributing centre for these as well as other tools, and we have supplied the Planet Goods to thousands of gardens in the West. We have now in stock, of 1888 pattern, the largest quantity of these Tools ever kept in the West, and have marked our prices accordingly.

PLANET JUNIOR COMBINED SEED DRILL.—It is, without doubt, the very best seed machine made for the two purposes, and does both well. The cultivating attachments furnished with each drill are a plow, a pair of protecting curved point hoes, a set of three cultivator teeth, and a pair of rakes. All the blades are steel, hardened in oil, tempered and polished. A wrench accompanies each machine, and full directions for use. By removing the roller and using the hilling hoes, seed can be dropped and covered deeply. It can be seen that it is an excellent sower; it is a first class double wheel hoe while plants are small; it is a first class single wheel hoe; it is an excellent wheel scuffle hoe; it opens furrows for corn, beans and potatoes, and covers them; it is an admirable wheel cultivator. Weight, packed, forty pounds. Price, \$10.00.

PLANET JUNIOR Double Wheel Hoe

OUR NET PRICE, - \$7.00
(LIST Price, \$8.00.)

PLANET JUNIOR DOUBLE WHEEL HOE, CULTIVATOR, RAKE AND PLOW COMBINED.—Has the invaluable feature of tending both sides of the row at once. The wheels can be set four, seven or ten inches apart. It has a pair of hoes, a pair of plows, two pairs of cultivator teeth, a pair of rakes and a pair of leaf lifters, making it capable of every variety of gardeners' work. Greatly improved for this season. Price, \$7.00.

THE PLANET JUNIOR PLAIN DOUBLE WHEEL HOE.—To meet a demand from onion growers and others who want a hoe only, we offer the Double Wheel Hoe just described, supplied simply with one pair of long curved point hoes. This tool has the same adjustment of hoes and wheel as the above and any or all of the other attachments may be added to this at any time, and will be found to fit. Our net price. \$4.25.

PLANET JUNIOR NO. 2 DRILL.—It has the following important advantages; an adjustable opening plow directly between the carrying wheels, the only position and plan which insure opening and covering at a regular depth. It is shown in the engraving at work. A spring back reservoir which can be accurately and instantly adjusted a hair's breadth at a time to every kind of seed, which it always sows with regularity, whether there is much or little in the hopper. Weight, packed, forty pounds. Price, \$7.50.

PLANET JUNIOR SINGLE WHEEL HOE—Is considerably lighter than the Double, and is supplied with one pair of hoes, three reversible cultivator teeth, two narrow and one broad, a large garden plow, and a pair of rakes. It is capable of a great variety of combinations and is admirably adapted to the use of small gardens. Price, \$5.25.

THE FIREFLY SINGLE WHEEL HOE CULTIVATOR AND PLOW COMBINED.—It is light, strong and adjustable to quite a variety of work. It has two hoes which work either to or from the row, three cultivator teeth, and one garden plow, a single handle of stiff iron. Though like the former Firefly, it has the additional hoes and teeth. Price, \$4.00.

THE FIREFLY WHEEL GARDEN PLOW.—This little plow has been found very useful for gardeners and private families, in opening furrows, covering seed in drills and hilling growing plants. We have a large demand for them. Weight, 10 lbs. Price; \$2.35.

PLANET JUNIOR HORSE HOE AND CULTIVATOR COMBINED, STEEL STANDARD WITH WHEEL.—For season of 1888 we offer the recently patented Hollow Steel Standard Horse Hoe with latest improvement; the frame is entirely of steel, the malleable fittings improved in design and strength, and the standards are made from heavy sheet steel by a new process. It is excellent in design, workmanship and finish, and capable of a great number of combinations, all of which are useful to every farmer, and admirable for the purpose intended. The Tool, except the handles, is made of wrought and malleable iron and steel, and has the standing clevis with locking pin, the stirrup clamp, the frame adjustable in width, the handles changeable in height, teeth adjustable to depth, or angle, and reversible points. By removing the two forward teeth and the rear steel, and attaching in place of the latter the covering roller, the machine is equipped for covering Corn, Potatoes, or other Seed, covering the Seed and rolling at one passage. The price is for the New Hollow Steel Standards, which are higher, stronger, and of better shape than the old malleable iron standards. Price, with wheel, \$9.00, without wheel, \$8.00. Covering Roller, extra, \$2.50. Extra set of Five Cultivator Steels, 1 1/4 in. to 4 in. \$1.00.

ATTACHMENT FOR EARTHING CELERY.—A short furrowing tooth, with long adjustable wings, attached to knee pieces made to take the place of the side standard, then by opening or closing the frame in the usual way the wings are expanded or contracted to suit all widths, from 2 to 3 1/2 feet. The knees are also slotted, so that the wings can be adjusted in height to suit the crop in its different stages. Price, \$4.00. Improved for 1889, try it with the Horse Hoe.

PLANET JUNIOR, NO. 2 DRILL.

FIREFLY WHEEL PLOW.

PLANET JUNIOR, HORSE HOE AND CULTIVATOR.

SUNDRY FARM AND GARDEN TOOLS AND SUPPLIES.

Prices given below do not include prepaying of charges, except when noted.

Sulphur Bellows.

New French Dibber.

Nixon Nozzle.

Potato Fork.

Potato Shovel.

Dibber.

Garden Line Reel.

Horse Radish Grater.

Scuffle Hoe.

Boynton's Pruning Saw.

Barrel Truck and Hand Cart, Combined.—It is one of those articles that cause the user to wonder how he ever did without it, as it really becomes indispensable when once used. The barrel is raised from the ground, carried to the place desired and INSTANTLY DETACHED, all WITHOUT HANDLING. The weight being balanced over the axle, no lifting or no castings; all irons are of best wrought. Price, WATER TRUCK, with barrel \$12; box, extra, \$3; Complete, \$15.

Bellows.—Used for dusting plants with sulphur or like material. Two sizes, each, \$1.00 and \$1.25.

French Liquid.—For liquid insecticides, \$1.75.

Bouquet Tubes.—For Buttonhole Bouquets. With gilt pin, each, prepaid, 15c; per doz., \$1. without pins, each, 10c; doz., 75c.

Brackets, Iron Flower Pot.—Handsomely finished. For 1 pot, 25c; for 2 pots, 40c; for 3 pots, 60c.

Cocoanut Fibre.—Per ½ bbl., \$2.25; per bbl., \$4.00.

Dibber.—For transplanting vegetable plants, steel points, very desirable, each, 50c.

New French.—Just the thing for making holes for pot plants, each, 60c.

Fruit Picker, Boston.—Made of galvanized steel wire, is very durable and the most practical picker made; can be easily fitted to handle. Not prepaid, each, 40c.

Garden Lines.—Best braided, 200 ft., \$1.25; 100 ft., 65c.

Garden Line Reel.—each, 60c.

Garden Tools.—Ladies' floral set, four pieces, short handles, 60c.

— Ladies' and Children's, long handles, 75c.

— Boy's set, large, \$1.10

Garden Roller.—1 sec. 12x24, 200 lbs., \$12.00

— 1 sec. 12x28, 250 lbs., \$14.50

— 2 sec. 12x20, 300 lbs., \$16.00

— 2 sec. 12x24, 400 lbs., \$20.00

— 2 sec. 12x28, 500 lbs., \$23.00

Glass Cutter.—Diamond Universal, \$3.50.

— and Glazing Tool, 10c.

Grafting Wax.—Per ¼ lb. bar, 15c; ½ lb. bar, 25c; 1 lb. bar, 40c.

Grass Hooks.—English, two sizes, each, 50c. and 60c.

Hand Cart.—Has ¾ in. iron axle, 29 ½ in. long; wheels 30 inches high and tire 1x3-16. Box 20x32 inches outside and 10 inches high. Weight 50 lbs. A very substantial cart for light work. Price, with tongue, \$7.00.

Hoes, Scuffle.—Almost indispensable to any garden. A very useful and labor-saving tool. Price, each, 6-inch, 35c; 7-inch, 45c; 8-inch, 55c; 9-inch, 65c.

— **Dutch Garden Hoes.**—Each, 50c.

— **Crescent Hoe.**—Each, 65c.

— **Warren.**—This very serviceable tool is made of best steel, and every hoe warranted. We now make it in two sizes, as follows: No. 1, price 65c; No. 2, 85c.

— **Superb.**—A splendid tool, each, 65c.

Hoe, Red Rubber.—Three ply, extra heavy. We have sold a large quantity of this grade, and it has given general satisfaction. It is very durable and the best for general use. We keep it in lengths of 25 and 50 feet, and these we do not cut. Price, ¾-inch, per 25 feet \$3.75; 50 feet, \$7.00; 100 feet, \$13.00.

Horse Radish Grater.—each, 60c.

Improved Paris Watering Pot.—each, 60c.

Iron Flower Pot Brackets.—each, 25c; 40c; 60c.

Ladies' and Children's Garden Tools.—each, 75c.

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Ladies' and Children's Garden Tools.—each, 75c.

Horse Radish Grater.—No. 1, capacity of 50 lbs. of roots per hour; weight, 38 lbs., \$7.00.

Hose Reel, "The Success."—This is the best cheap Hose Reel, substantial and neat. Has wrought iron braces, iron bearings, and six supports or rounds, which prevent the hose from cracking, and keep it in circular form. It has ratchet for reel and nozzle-loops; the wood work is oiled and varnished. Price, for reel with capacity for 100 feet ¾-inch hose, \$2.50; Reel for 200 feet hose, \$3.50.

Hose Menders, Hall's Patent.—Very useful and cheap. Price, ¾ in., per doz., \$1.00.

Hose Menders, Wooden.—Price, ¾-inch, per doz. 75c.

Hose Stand.—Galvanized iron, on 3 legs, each, \$1.50.

Hose Nozzle, "Gem."—New, throwing all variations from fine spray to stream. Price, \$1.00.

Hose Nozzle, Standard.—with stream and 2-inch spray. Price, 80c. Same, with 2 ½-inch spray. Price, \$1.00.

Hose Nozzle, Nixon's Patent.—By use of this nozzle all arsenic and poisonous preparations are brought directly in contact with insects, moths, beetles, and worms, etc., eventually exterminating them.

No. 1 Nozzle, for orchard or garden, \$1.25.

No. 6 Nozzle, for lawn, \$1.50.

Hydronette.—New French, throws continuous stream, with 2 extra sprays, each, No. 13, \$6.50; larger No. 12, \$7.25.

INSECT DESTROYERS.

Fir Tree Oil.—Soluble insecticide effectually destroying all kinds of pests to which plants are subject. Equally effective on animals and is harmless to the skin and hands when used as a wash. Full directions with each bottle. Per qt., \$1.25; pint, 75c; ½ pt., 40c; small bottle, 25c.

Whale Oil Soap.—One of the most effective and cheapest remedies to destroy slugs, worms and other insects on trees, shrubs, garden and house plants. As a general rule, seven gallons of water to one pound of Soap is used for applying to foliage. 2 lbs. 25c; 4 lbs., 40c; 8 lbs., 75c.

Tobacco Soap, Rose.—For washing and syringing plants, trees, etc.; a valuable preparation. Per ½ lb. box, 25c.

Tobacco Stems.—For fumigating plants infested with green fly, etc. Per lb. 15c; bbl. \$1.00.

Persian Insect Powder.—Very destructive to all insect life. Per ¼ lb. 25c; ½ lb. 40c; 1 lb. 75c.

Flowers of Sulphur.—A preventive of mildew on roses, grape vines, etc. Per lb. 10c; 10 lbs. 65c.

Paris Green.—Strictly pure. Per ¼ lb. 10c; ½ lb. 15c; 1 lb. 25c. Special rates on quantities.

White Hellebore.—Very effective for destroying rose slugs and currant worms. Per lb. 50c.

Henderson's Mildew Preventive.—Per pint 75c.

Cole's Insect Destroyer.—Has proven instantly fatal to Mealy Bug and Red Spider, without injury to any plant. Apply with the Atomizer. Per bottle 40c; qt. \$1.50.

Gishurst's Compound.—For destroying green fly, mealy bug, thrip, mildew, etc. Per pkt., 75c.

Hammond's Celebrated Slug Shot.—Guaranteed to destroy Potato Bugs and those on Tomato and Egg Plants, Currant Worms, Cabbage Lice and Worms, Flea Beetles and Striped Bugs on Melons, Squash, Turnips, Beets, Onions, &c. Canker Worms and Caterpillars on Fruit and Ornamental Trees. A preventive of the Rose Bug and Cut Worm.

Price, 5 and 10 pound packages, 6 cents per pound; 25 to 50 pounds at 5 cents per pound. By barrel full, in bulk, 25 lbs. to 250 pounds weight, 4 cents per lb. on cars at Chicago. Lower rates for large lots. It gives satisfaction. Write for circulars and testimonials.

Atomizer.—For applying liquid insecticides, 35c.

Hand Cart.

No. 1.

No. 2.

No. 3.

BOSTON FRUIT PICKER.

Seed Potato Knife.

Warren Hoe.

Tin Syringe.

Scollay's Sprinkler.

Tree Scraper.

Crescent Hoe.

Diamond Universal Glass Cutter.

Glass Cutter and Glazing Tool.

Microscope.

Hale's Mole Trap.

Boynton's Pruning Saw.

Porcelain Thermometer.

Self Registering Thermometer.

Imported German all Glass Thermometer.

Barrel Cart.

Superb Hoe.

Weeding Fork.

Transplanting Trowel.

Hedge Shears.

Buckeye Pruning Shears.

Wiss' Pruning Shears.

Grape Scissors.

Vaughan's Steel Trowel.

Roffea for Tying.

Noyes Weeder.

Hazelbine Weeder.

Avery Transplanters.

Lang's Weeder.

Excelsior Weeder.

Edger for Grass Borders.

Garden Wheelbarrow.

Brummer's Insect Powder Blower.—This is the handiest and best instrument for applying the Persian Insect Powder, Slug Shot, Hellebore, Paris Green, etc. Size, No. 1, for families, 25c, by mail, prepaid, 30c. Size, No. 2, for hotels, etc., 50c; by mail, prepaid, 60c.

Knives.—Mostly imported goods and of best steel and finish.

— **Asparagus.**—Each, 35c.

— **Budding.**—English, ivory handle, No. 1, \$1.00.

— Black handle, ivory tip, strong, No. 2, 75c.

— **Pruning.**—Stag handle, bent blade, No. 3, 90c.

— " " " larger, \$1.25.

— " " " straight blade, \$1.15.

— **Seed Potato Knife.**—Concave and curved, invaluable to all who cut potatoes. Send for circular. See cut. Each, 30c. (postpaid 35c); doz., \$3.00.

Labels, Wood, for pots, plain, 4 in. per 100, 15c; per 1000, 70c. painted. 4 in. per 100, 15c; per 1000, \$1.00.

Lawn Mowers—Philadelphia; THE BEST IN THE MARKET.

10 inch.....\$5.25	14 inch.....\$8.25
12 inch.....6.25	16 inch.....9.25
14 inch.....7.25	18 inch.....10.25
	20 inch.....11.25

Lawn Rake.—Davis'.....each, 75
 — Wood, 20 teeth.....35
 — Imported steel, removes white clover heads.....2.25
 — Champion, single.....80
 — double.....1.20

Leaf Mould.—Fine for ferns, etc., per bbl. \$2.00.

Mats.—Archangel.—For covering sash, each, 75c.

Microscopes.—Each, postpaid, 50c.

Mole Trap.—Isbell, \$1.85.

— Hale's. The best trap made, \$2.60.

Needles.—For sewing grain bags, each, 10c; doz., \$1.00.

Peat.—For orchids, etc., per bbl., \$2.25.

Plant Stakes.—Green Painted Tapering. Same are very neatly finished, of light wood and very useful for tying plants, shrubs, etc. Price, per doz., 24 in., 35c; 30 in., 45c; 36 in., 55c; 40 in., 65c; heavy, 4 ft., each, 10c; 5 ft., each, 15c.

— **Bamboo or Cane.**—4 to 7 ft. long, per 100, 75c.

Potato Fork.—Nine tined, each, \$2.25.

Potato Shovel.—Niles' steel wire, each, \$2.00.

Pot Covers.—Cardboard, imitation leather, adjustable, 6 in. largest diameter, each, 15c; per doz., \$1.50.

Roffea.—The best tying material for plants, etc. (10 lbs., \$3.50 lb., 40c).

Rustic Work.—Bridges, Summer Houses, Settees, Chairs of all sizes on hand and made to order.

Rustic Hanging Baskets.—Diameter bowl each, 8 inch, 85c; 9 inch, 90c; 10 inch, 95c; 11 inch, \$1.05; 12 inch, \$1.10 14 inch, \$1.65.

Rustic Stands.—Oblong, 28 in. high, 24 in. long, 8 in. wide, 6 in. deep, each, \$3.00.

— 28 in. high, 26 in. long, 9 in. wide, 7 in. deep, \$3.50.

Saws.—Boynton's Lightning Pruning Saw—As a pruning saw it has no equal. Holes are provided in the handle for attaching to a pole. The lightning teeth are used for the larger limbs, while the fine teeth are used for cutting the small limbs and twigs, thereby doing away with the knife and shears. Price, 16 inch, 85c; 18 inch, \$1.00; 20 inch, \$1.25.

Sprinkler, Scollay's Rubber.—Indispensable for Floral work and Window Gardening, invaluable when once tried. Very useful for dampening clothes or sprinkling in any way. Beware of imitations, as this is the best. We sell, prepaid, \$1.10; not prepaid, \$1. Same style, medium, 60c; small, 50c.

— **Four-Arm Lawn Sprinkler and Fountain.**—One of the most useful and reliable Sprinklers made; makes a beautiful fountain by changing the jet. Price, each with stand, No. 1, \$2.50; No. 2, \$4.

— **Globe.**—Rotary, each, \$1.00.

— **Merrill Rotary,** excellent, each, 35c.

Scythes.—Best English, riveted, each, \$1.25

Scythe Stones Talacre.—Imported, fine, each, 25c.

— **Domestic.**—Each, 15c.

Seed Tryer.—Pocket, nickel plated, each, 75c.

SHEARS.

Shears, Hedge.—Best imported goods, 9 inch, \$2.25; 10 inch, \$2.50; 11 inch, \$3.25.

— **Border.**—Long handles, 9 inch, \$3.00; with wheel, \$3.50.

— **Ladies'.**—Light, useful for light work, \$1.50.

— **Wiss' Pruning.**—For vineyard and other pruning where an instrument that cuts well on the point is required. This will be found a desirable as well as a durable shear.

No. 1 Price, each, \$2.00; by mail, prepaid, \$2.25

No. 2 " " 1.90; " " 2.15

No. 3 " " 1.75; " " 2.00

— **French Secateurs.**—(Pruning shear) strong and of good steel, \$1.60; by mail, prepaid, \$1.65.

— **Buckeye Pruning.**—Whole length, 2 feet; weight, two and one-half pounds. Price, \$1.25.

— **Lee's Pruning.**—Improved spring, each 7 inches long, \$1.00; 8 inches, \$1.50.

— **Grape. (Picker).** Each, \$1.00.

— **Rose Pruning.**—Imported, nickel plated, a very fine tool for ladies, 75c.

— **Sheep.**—For trimming grass, each, \$1.25.

Shells, Sea.—White, for bordering flower beds, 100, \$2.00.

Sod Cutter, Richmond.—Cuts the sod of uniform width and thickness, in any length, so that it is particularly adapted to giving solidity to slopes in cuts and on embankments, working equally well on level or uneven surface, cutting both ways with the land and leaving no sod uncut. It is light of draft, easily managed, strong, neat and durable. One machine will cut from 30,000 to 40,000 square feet per day, thus doing the work of FORTY men. Directions with machines. Indispensable to all who cut sod in quantity. R. R. Men, Parks, Cemeteries, etc.; send for special circular. Price, hand machine, 8 in., \$13.50; horse machine, 12 in., \$27.00.

Spades.—Ames' Nursery, very strong, each, \$1.50.

— **Boys' each, 75c.**

Syringes, Brass.—For Ladies, 14 inch, \$2.50.

— No. A A Parlor, \$1.15.

— 5, Greenhouse syringe, \$5.50.

— 18 inch, with 3 different sprays, \$3.75.

— No. 14. Syringe, brass for insecticide, \$2.25.

— No. 15. nickel, " \$2.75.

— **Improved Tin.**—For applying liquid Insect Destroyer, \$1.00.

— **New French Zinc.**—With brass spray, \$1.25.

Thermometers.—Tin case, 8 in., each, 20c; 6 for \$1.00.

— **Standard,** wood case, each, 45c; 3 for \$1.25.

— **Imported German,** all glass, for propagating beds and hot beds, each, \$1.00.

— **English Porcelain.**—Very accurate, each, \$1.00.

— **Self-Registering.**—With magnet to set it, each, \$2.75; larger size, \$3.25.

Thistle Cutter.—Sharp, narrow blade, with handle, for removing thistles or weeds from lawns, without disturbing the turf. Each, 75c.

Transplanter, The Avery.—Just the thing for gardeners. It marks out a new era for transplanting, doing it better and quicker, saving plants and time enough to many times pay its cost. Plants removed by it do not wilt. The tool is a good one, and every gardener should have it. Price, small single-hand size, each, 50c; large two-hand size, \$2.00.

Trellises.—This is by far the most ornamental and substantial trellis made, being especially adapted to outdoor use, for high climbing shrubs and vines.

— **Fan Shape.**—18 in., 15c; 24 in., 20c; 30 in., 25c; 3 1/2 ft. 21 in. wide, 40c; 4 ft. 27 in. wide, 50c; 5 ft. 32 in. wide, 60c; 6 ft. 38 in. wide, 70c; 4 ft. 42 in. wide, 80c.

— **Veranda.**—18 in. wide, 5 ft., 55c; 6 ft., 65c; 7 ft., 75c; 8 ft., \$1.00; 9 ft., \$1.15; 10 ft., \$1.40.

Tree Pruner, Waters.—Length of pole, 4 feet, \$1.85; 6 feet, \$2.00; 8 feet, \$2.20; 10 feet, \$2.40. Extra knives, each, 30c. New patterns without pole, each prepaid, \$2.25.

Trowels, Vaughan's Steel.—Made especially for our trade. It is of one solid piece of steel, and will outwear several of the ordinary sort. It is an article for which we have had many inquiries, meeting a long-felt want. Price 50c; prepaid, 60c.

— **Fern.**—With leather sheath, each, 85c.

— **Transplanting.**—50c.

— **Ordinary Garden Trowels.**—6 in., each, 15c; half-dozen, 75c; 7 in., each, 20c; half-dozen, \$1.00; 8 in., 25c; half-dozen, \$1.20.

— **Imported English Steel.**—Light and very durable, 6 in., each, 25c; 7 in., each, 30c. By mail add 10c.

Turf Edger.—For trimming walks, with handle, 75c.

— **Imported English.**—Extra finest steel, no handle, each, \$1.10.

— **Square Edge.**—See cut, each, 65c.

Watering Pots, French Zinc.—These are made of best material and are very useful and durable.

No. 0, holding 3½ quarts, each,	\$1.10
" 1, " 5 " " "	1.25
" 2, " 7 " " "	1.50
" 3, " 10 " " "	1.75
" 4, " 12 " " "	2.25

Weeders, Noyes.—An old standard article, in use for many years, each 30c; postpaid 35c; doz., \$3.00.

— **Hazeltine.**—Of the best solid steel, good size, and durable; in very general use over the country. Each 25c; postpaid 30c; doz., \$2.25.

— **Excelsior.**—A very useful little tool for weeding seed beds, stirring the ground, etc. Each 25c; postpaid 35c; doz., \$2.00.

— **Lang's Hand.**—One of the best of this class, allowing use of hand while working. Each 25c; postpaid 30c; doz., \$2.25.

Weeder, Gem Hand.—A very useful tool. Price, each, 25c.; postpaid, 30c.

Weeding Fork, Hand.—Imported, each 50c; postpaid, 60c.

Wheelbarrow.—Best for garden work, \$4.00.

Perfection Mole Trap.—Very highly recommended by the Phila. Seedsmen, where the tool is made. Price, \$2.00.

Pierce's Improved Cahoon Broadcast Seed Sower.—A hand-machine very largely used.—The quantity to be sown is easily regulated. It distributes EVENLY four to six acres per hour. It will scatter the following distances: Wheat, Barley, Rye, 25 feet; Clover and Timothy, 18 to 20 feet; Orchard Grass and like seed, 12 to 15 feet. The bag and hopper hold about 22 quarts. Weight, 5½ pounds. Price, \$4.00. Three at one time for \$10.00. Six in one order for \$19.00. (Club with your neighbors when ordering seeds.)

Smith's Device for Preserving Seed Corn.—Patented June 22, 1880, consists of a spiral cone to be screwed in the end of the ear and attached by the hook to a perpendicular wire, with hooks or loops on the end; suspended from a beam or rafter, is inaccessible to rats or mice, and permits a free circulation of air around each ear, whereby the corn is thoroughly dried. Nearly all corn at the World's Exposition was shown by these hangers. Six hundred screws (six boxes) with twelve hanging wires, sent, postpaid, for \$2.50. 1 Box, 50c.

THE MCGEE CULTIVATOR.

The feature of this tool lies in the fact that it straddles the row and that the handles can be moved independent of each other. Each handle has one of the knives attached to it and is held steady by a spring so that the blades can be moved up to or away from the plants as desired, while in use it is not necessary to stop and loosen bolts to adjust it, but simply move your hands in or out, and the blades will close so as to cut out all the plants and weeds, or open so as to pass by and leave the plants standing. This can be done with such ease, and so accurately after becoming used to the machine, that a man will work it as fast as he can walk and cut the weeds closer to the plants than can be done by other machines. Price, complete with two sets of blades, \$6.00.

Miner's Gold Medal Subsoil Plow is the best in the market.—The advantages of such a plow are too well known to refer to. One horse, each, \$6.50; Two horse, \$9.50; Wheel, extra, \$1.00.

Daisy Cabbage Plow.—A combination cabbage and furrowing plow, having three mouldboards as shown in cut, the two smaller ones to be used in cultivating all root crops, and the large mouldboard can be used in plowing the ground or furrowing. It is a very great favorite among the Long Island Gardeners, and is really indispensable to economical gardening. Price, complete, with an extra share and three mouldboards, \$7.00.

Richmond Sod Cutter.

Humphrey's Concave Potato Knife.

In these days of close competition, it is only by using improved implements and superior labor-saving methods that the agriculturist can make the farm pay. With the Concave Potato Knife, seed potatoes can be cut better, and \$2.00 to \$3.00 an acre saved in seed and time by its use. The blade is very thin, and just the right shape to divide the potatoes into one, two or three eye pieces very rapidly without cracking the tuber or injuring the vitality of the germs. Our illustration shows how the eyes are cut with the knife, making a compact piece with the eye in the center surrounded by the greatest possible amount of tuber. If the same eye had been cut with a straight knife, the piece would be thin, flat and broad, liable to dry up and decay before germinating. The knife is no experiment. Hundreds of potato growers and seedsmen have endorsed them the past four years. Seventeen Agricultural Experiment Stations have them in use. We manufacture and sell this tool in the United States and Canada, and believe it the best article of the kind in existence for every potato planter, securing as it does, more of the body of the tuber with every eye cut than any other method of cutting, there being no waste whatever. We sell the knife on its merits, and will refund the money to any one who is not satisfied. A circular is put up in each box with the knife. If left-handed, please mention it when ordering. Price, postpaid, 35c each; Six for \$1.75; Twelve for \$3.35.

Cahoon Seeder.

The Calf Feeder.

The Calf Feeder.—This is designed for feeding milk to young calves in a natural way, and is for the calf what a nursing bottle is to a babe. The cut describes it better than type can. It holds seven quarts, and is sent with cleats, screws and hook, all ready for use. It is well and thoroughly made, and so cheap that every farmer can afford one. Writes J. C. Stevens, Holstein stock-breeder, Attica, N. Y.: "I have in use several of your Calf-Feeders, and we can cheerfully recommend them as of great merit, as supplying a long felt want." Price per express, with one extra nipple, \$2.50; per mail, postpaid, \$3.00. Duplicate teats mailed for 25c.

Daisy Cabbage Plow.

Lawn Sprinkler and Fountain.

Scythe Stone.

Hose Reel.

Turf Edger.

English Lawn Scythe.

Standard Hose Nozzle.

Sheep Shears.

Gem Nozzle.

Phila. Lawn Mower.

Garden Hose.

Globe Sprinkler.

Garden Roller.

Perf. Mole Trap.

Border Shears. Hale's Mole Trap.

[No. 0, Family Grist Mill, \$5.00.]

WILSON'S BONE MILLS.

We are Chicago Agents for these Celebrated Mills, and sell hundreds every year, with very general satisfaction. Mr. Wilson speaks of them as follows: "I used to pound Shells and Bones for my Poultry in a mortar. That way was hard work, and it took a great deal of my time—TIME IS MONEY. This led me to devise some means by which TIME COULD BE SAVED AND LABOR MADE EASY. I now claim that both can be accomplished by using one of these HAND-MILLS. They are a COMPLETE SUCCESS for crushing oyster shells, grinding bone meal, and all kinds of grain, coarse or fine, for Family or Stock use. Also grinds corn or cob. A PECK OF SHELLS can be crushed in FIFTEEN MINUTES. They are made in the VERY BEST MANNER. They can be adjusted for grinding either COARSE OR FINE. Whole oyster shells can be put in the mill, as well as bones of the same size."

No. 1, without iron legs, weight 35 lbs (3 for \$13.00.) \$5.00 | No. 2, without iron legs, weight 50 lbs.....\$12.00
No. 1, with " " " 65 lbs..... 7.00 | No. 2, with " " " 90 lbs..... 16.00

The No. 2 is for greasy and dry bones, shells and all kinds of grain, and has loose grinding burrs.

Green Bone Mill No. 1, hand size, for grinding bones right from the butcher 15.00
Farm Grist Mill No. 2, Every farmer needs it; for grinding corn and cob, fine corn meal and Graham flour for table use. Can be run with one or two-horse power; weight, 150 lbs 25.00
No. 1, and No. 1 Green Bone Mill, Combined, weight about 175 lbs. For grinding dry bones, shells and all kinds of grain, green and greasy bones and offals from the table 22.50

Write for Illustrated Descriptive Circular of all the different sizes of Bone Mills.

CLARK'S STOCK GROWER'S ROOT CUTTER.

The feeding of roots to stock during the winter months is of so great advantage, assisting in keeping the animals in good health and giving them a good appetite, that it has come to be regarded by our best feeders as almost a necessity. It is found that by cutting vegetables and straw, coarse hay, or any other cheap forage, to the best advantage and mixing them together, that after lying a short time the whole mass becomes impregnated with the juices of the roots, giving the whole a freshness and taste very palatable to cattle and sheep. For cutting roots, pumpkins and vegetables, we offer the following CLARK'S ROOT CUTTERS improved for season of 1888. The above cut is represented as broken in frame, for the purpose of showing cutting apparatus. This cutting apparatus consists of TWENTY-FIVE STEEL KNIVES (gouge shaped), so arranged on a wrought iron shaft that they cut perfectly; no chance of becoming loose or breaking. The roots are neatly cut in pieces suitable for feeding. No coarse or ungainly pieces are left by this cutter. A boy can easily cut 20 to 40 bushels per hour. Best size, No. 2, \$10.00. No. 3, for horse power, will cut 100 bushels per hour, \$20.00.

THE ACME HARROW.

We have the agency for Chicago and vicinity for the ACME PULVERIZING HARROW, CLOD CRUSHER AND LEVELER. The "Acme" subjects the soil to the action of a crusher and leveler, and to the cutting, lifting turning process of double rows of steel coulters, the peculiar shape and arrangement of which gives immense cutting power. Thus three operations of crushing lumps, leveling off the ground and thoroughly pulverizing the ground are performed at one time.

Highly commended by scientific and practical farmers, many of whom pronounce it the most valuable recent improvement in farm machinery, while all agree that the judicious use of an implement like the Acme Pulverizing Harrow, Clod Crusher and Leveler in the "preparation of the soil before planting will increase the yield from five to ten dollars per acre." The price of the leading size, No. 10, is \$22.00, cash with order, on board the cars in Chicago. This is the two-horse machine, 6 ft. cut.

WING SHOVEL PLOW.

For hilling potatoes no tool has been found to equal the WING SHOVEL PLOW. It will also be found serviceable in the cornfield. The wings are attached to the blades by hinges, and are easily adjusted. We have had these made for us in quantity by contract, and are able to offer them to our numerous potato customers at an extremely low rate. The material, workmanship and finish are first-class in every respect. Price, each, \$5.00. Three to one address at one time, for \$14.00.

NEW SHOVEL PLOW. (COMBINED WITH ONE-HORSE PLOW.)

This Plow is made with a standard, to which the plow-share, as shown in the cut, may be bolted when the winged shovel plow is removed, making the tool a one-horse plow for opening furrows, or any garden work required and a first-class shovel plow, which is almost indispensable to every gardener for potatoes, celery, corn, etc. \$7.50.

ALBANY CORN AND SEED PLANTER.—Saves its cost in planting ten acres of corn. One man and a horse can plant from seven to ten acres a day with planter at a cost of from \$3.00 to \$5.00. This planter at one process opens its furrows, gauges, drops, covers the seed and rolls them down. Also measures and marks off the distance for the next row or drill to be planted. It will plant all kinds of garden and field seed as well as corn.

Price of Planter, \$20.00; price of Planter with either Horse Hoe or Fertilizer Attachment, \$22.50; price, with both Horse Hoe and Fertilizer Attachment, \$25.00.

TRADE

GARDENER'S FAVORITE CULTIVATOR.

MARK.

IRON FRAME.

Fig. 1, Rounded Tooth; Fig. 2, Diamond Tooth; Fig. 3, Rear Plow; Fig. 4, Side Hoe; Fig. 5, Weeder; Fig. 6, Wheel; Fig. 7, Horse Hoe ready for operation.

We have had manufactured for us this season by the original makers of the Iron Age Cultivators an extra grade of iron frame machines, which we have named the "GARDENER'S FAVORITE." The frame, legs, teeth, bolts, wheels and handles are made of the very best materials, and very handsomely finished. It may not be generally known but it is a fact that the reputation of these Iron Age goods has been so high that many inferior imitations have been made, therefore we have had the above grade extra well made, and copyrighted our trade mark, "Gardener's Favorite." Try it and you will get value received. NOTE REDUCTIONS FOR 1889.

STYLE No. 1.—Gardeners' Favorite.—Plain; 5 teeth, with either style teeth, Fig. 1 or Fig. 2..... \$4 50
STYLE No. 2.—Gardeners' Favorite.—Five teeth, either style, and wheel..... 5 50
STYLE No. 3.—Gardeners' Favorite.—Five teeth; pair horse hoe attachments, rear plow and wheel..... 7 00
STYLE No. 4.—Gardeners' Favorite.—Five teeth, pair horse hoe attachments, rear plow, wheel, leveler and weeder—
all parts for..... 8 50

SEPARATE PARTS.—Each as follows: **Pair Horse Hoe Attachments** like Figure 4, with standards, \$2.00
Wheel, Fig. 6, \$1.00; **Weeder**, Fig. 5, \$1.25; **Leveler**, not shown in cuts, \$1.25; **Rear Plow**, Fig. 3, 50c.; **Cultivator Teeth**, without standards, pattern No. 1 or No. 2, 35 cents.

"IRON AGE" Cultivator, regular style and make, plain, with 5 teeth,each only 4 00

N. B.—Order by number and state whether you want Diamond Teeth, Figure 2, or Round Teeth, Figure 1.

• FERTILIZERS. •

Commercial Fertilizers are sure to come into more general use in the West as fast as they are tried. Their quick and direct action commend them to the Gardener. A customer who once buys almost invariably continues its use. The enormous quantities sold in the East give the best evidence of its utility and value to the Gardener and Farmer. Chicago is the largest manufacturing place in the country for these manures, obtaining the bones from the Western plains and from local slaughter houses. We can make the lowest prices. The quantity to use per acre depends on the crop to be cultivated and condition of soil. We prefer not to put up any sizes not here offered, as it requires much valuable time during our busiest season, but we will put up to order assorted lots of not less than six kinds for experiments at special rates. Send a list for prices.

PURE BONE MEAL.—ANALYSIS: Ammonia, 3 to 4 per cent.; Bone Phosphate, 45 to 55 per cent. Every bag is guaranteed pure Bone. It is made from the bone gathered from the plains and farms without being steamed or baked. Price, per bag of 200 lbs., \$4.50; five bags or over, \$4.00. Harrow or drill in, using 200 to 300 lbs. per acre at time of seeding. In small lots by express, not prepaid, 5 lbs., 30c.; 10 lbs., 50c.; 25 lbs., \$1.00; 50 lbs., \$1.65; 100 lbs., \$2.75.

GARDEN VEGETABLE COMPOUND.—ANALYSIS: Ammonia 3 to 4 per cent.; available Phos. Acid, 8 to 9 per cent.; Sulph. Potash, 2 to 3 per cent. Harrow it in, using 300 lbs. per acre. The best Fertilizer for vegetables is one that is soluble and furnishes the food quickly, and only such nourishment as will be absorbed in vine, stalk, leaf and large fruitage. These elements are united in perfect proportions in the **Garden Vegetable Compound**. It is put up in bags, odorless, clean to handle, and reasonable in price. Its application is simple. Directions accompany each package. Price, per bag, 50 lbs., \$1.65; 100 lbs., \$2.75; 200 lbs., \$4.50.

GARDEN CITY SUPER-PHOSPHATE.—ANALYSIS: Ammonia 2 to 3 per cent.; Bone Phosphate, 24 per cent.; Available Phos. Acid, 8 to 9 per cent.; Sulph. Potash, 1 to 2 per cent. It stands without a rival as the largest crop producer at the smallest outlay. It is a complete manure. You can buy Phosphates that cost \$5 to \$10 per ton more, but you can't buy one that will give larger increase of crops. Every bag is up to the standard and always equal in strength and mechanical condition to that heretofore sold. Price, per bag of 200 lbs., \$3.50; five bags, or over, per bag, \$3.20. Harrow or drill in, using 200 to 300 lbs. per acre. If applied with drill, 200 lbs. will give excellent results, but if applied broadcast, use 300 lbs. per acre.

LAWN FERTILIZER.—ANALYSIS: Ammonia, 3 to 4 per cent.; Avail. Phos. Acid, 8 to 9 per cent.; Sulph. Potash, 3 to 4 per cent. It can be applied either in the spring, summer or fall as a top dressing at the rate of one pound to 16 square feet. Stable dressing for lawns is objectionable in appearance, odor, weed seed and cost. Our **CHICAGO LAWN FERTILIZER** overcomes all these, and supplies the soil with requisite food for a uniform and luxuriant growth of grass. Price, 10 lbs., 50c.; 25 lbs., \$1.00; 50 lbs., \$1.75; 100 lbs., \$3.00.

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