Historic, archived document

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

Livingston's
ESTABLISHED 1850

Seed Annual
for
1918

LIVINGSTON SEED CO.

114 NORTH HIGH ST.

COLUMBUS, OHIO

FAMOUS FOR TOMATOES

LIVINGSTON'S
MANYFOLD
TOMATO

PKT. 35¢
HALF SIZE PKT. 20¢

Our Great One-Dollar Collection of "True Blue"

\$1 POSTPAID

Vegetable Seeds

\$1 POSTPAID

EVERY sort included represents the best of its class and many high-priced novelties of real merit make this collection doubly worth while. The demand for this collection started years ago when we would get orders from people for a dollar's worth of vegetable seeds—"the best we could do." Many are not familiar with the merits of the different sorts offered in this catalogue and for those we get up this collection the best we know how.

From year to year we change it. Obsolete sorts are dropped, new varieties of better character added, and we firmly believe that a better collection than ours cannot be bought at so low a price anywhere in this country.

For many years this collection has been considered the biggest Dollar's worth of really good seeds offered. This year many of the sorts are very

scarce, yet we offer the same number of liberal-sized packets as usual, and all of "True Blue" quality.

The reasons why we sell this collection at such a low price are: We can put up hundreds of the boxes before the spring rush starts, so that, when the order comes, all that needs to be done is to wrap the box, affix postage stamps, and out it goes—always the same day we get the order. No changes can be allowed. This popular-priced collection also gives new customers an opportunity to try a large assortment of "True Blue" seeds at a moderate cost. We consider each collection sold a good investment, which, in time, will bring us increased business.

This Dollar Collection cannot be included with any special offers found in this catalogue. It is a great bargain as it is.

HERE IS WHAT ONE DOLLAR WILL BUY:

Thirty-two (32) Liberal Packets, as Follows, for Only One Dollar

1. Beans—Dwarf, Stringless Green Pod. Fine.
2. Beans—Dwarf, Hardy Wax. Fine wax pod.
3. Beet—Detroit Dark Red. Very early and tender.
4. Beet—Dewey's Blood Turnip. Very tender; long keeper.
5. Cabbage—All-Seasons Early. Flat-heading sort.
6. Cabbage—Ideal Winter. Solid, tender.
7. Celery—Columbia. Good flavor and keeper.
8. Cucumber—Klondyke. Dark green, shapely pickle.
9. Cucumber—Livingston's White Spine. Best slicer.
10. Sweet Corn—Country Gentleman. Large early.
11. Sweet Corn—Livingston's Early Sugar. Early and sweet.
12. Lettuce—Big Boston. Tender, large-headed sort.
13. Lettuce—Grand Rapids. Finest early curled.
14. Lettuce—Wonderful. Fine heading sort.
15. Watermelon—New Chilian. Quality very delicious.
16. Muskmelon—Netted Gem. Green flesh; early; sweet.
17. Muskmelon—Perfection. Salmon flesh.
18. Onion—Yellow Globe. Best for general crop.
19. Onion—Red Globe. Fine; good keeper.

20. Pepper—Sweet Salad. Very thick meat.
21. Parsnip—Hollow Crown. Large and extra sweet.
22. Parsley—Moss Curled. Very fine green variety.
23. Peas—Advancer. Early, sweet, prolific.
24. Peas—Gradus. Large pods, full of sweet peas.
25. Radish—Cincinnati Market. Long, red, early.
26. Radish—Chinese Rose Winter. Bright red.
27. Radish—Livingston's Pearl. Fine, long, white variety.
28. Squash—White Bush. For summer use.
29. Squash—Hubbard. Fine for winter use.
30. Tomato—Livingston's Favorite. Fine red variety.
31. Tomato—Livingston's Beauty. Fine purple sort.
32. Turnip—Purple-Top White Globe. One of the best.

FREE With each order for OUR GREAT DOLLAR VEGETABLE COLLECTION the buyer may select one packet of either Livingston's Fine Mixed Sweet Peas, or one packet of Livingston's Top-Notch Mixture of Tall Nasturtiums. With each collection we enclose a helpful leaflet of cultural directions, "The Vegetable Garden."

You Should Have a War Garden this Year

To Our Friends, Our Customers:

Columbus, Ohio, January 1, 1918.

ON JANUARY FIRST, of 1917, we felt that we were never better prepared to take care of our annual mail order and store trade, but soon after we had sent out our Seed Annual, it became apparent that our "preparedness" was insufficient, for the rush of orders that overwhelmed us for a time. Many crops were short from one reason or another. Freights were badly congested, and some embargoes held up shipments for a time, owing to war conditions. For about six weeks our trade was fully 100 percent greater than the year previous. Our customers were very considerate, in patiently waiting far beyond the time of our usual prompt deliveries, and we take this occasion to say, "thank you."

We have made preparations on a more elaborate scale for the coming season (1918) but many stocks are certain to be again short, owing to unfavorable conditions during the growing season, and at harvesting. We want to assure our friends, however, that we will do all in our power to render as prompt and careful service, throughout the season, as conditions will permit. Let us have your orders as early as possible and we will get them forward as soon as possible. Where it is necessary we may send some items at once, and balance later.

We know that our True Blue Seeds have made a good record during the past season, judging from our trial ground showings, and the many kind letters of commendation received. Livingston's True Blue Seeds, in the hands of thousands of enthusiastic professional and amateur gardeners, "did their bit" grandly in producing food for our own and other people in the past season. There is scarcely no one, who has the smallest piece of ground, that cannot help along in the great work of feeding the nation. No one can do so to the best advantage, however, except with the best seeds and tools—The Livingston True Blue kinds. We trust our folks will use them to the fullest extent the coming season, and that they will be blessed with an abundant crop. With best wishes, we remain

True Blue Trial Grounds and Greenhouses,
near this City.
Kirkersville Seed Farm, Kirkersville, Ohio.
Retail Store, 114 North High and 9-11 East
Long Sts.
Seed Warehouse, 59-61 East Chestnut St.

Yours to command,

THE LIVINGSTON SEED CO.

Important Suggestions

By carefully observing the following Directions, Mistakes and Misunderstandings will be very largely avoided.

Columbus, Ohio, is a city of over 225,000 inhabitants, centrally located geographically, has 17 steam railroad systems, 11 electric roads, which practically cover the entire country, Express Companies, Telegraph and Telephone wires in all directions, which afford us unequalled facilities for receiving orders, shipping and procuring lowest rates to all parts of the country; besides you have the assurance of getting your order in the quickest possible time.

Within Twenty-four Hours' Time We Can Reach Two-thirds of the Population of the United States.

ALWAYS USE THE ORDER BLANK and envelope sent with this Catalogue when possible. Write plainly, keep a copy of your order, and be sure to sign your name, Postoffice, County and State every time you write to us. Extra Envelopes and Order Blanks will be sent on application, also additional Catalogues, if desired.

SEND MONEY. Remittances should always accompany the order. Remittances may be made at our risk by any of the following methods. (1st and best)—**Postoffice Order**; (2d)—**Bank Draft**; (3d)—**Express Co. Money Order**; (4th) **Cash by Express** in amounts not less than \$5.00; (5th)—**Registered Letters**. When money cannot be sent by either of the first four methods, it may be enclosed in a Registered Letter. The rates charged for Postoffice Orders and Express Money Orders are now so low this is the best way to remit where they can be obtained. We will bear expenses of sending money in either of above ways when order amounts to \$1.00 or over.

NO GOODS SENT C. O. D. Unless cash to the amount of one-fourth the order accompanies the same.

SEEDS BY MAIL. Sending seeds by mail is a very important branch of our business, as we are now using an entire building, apart from retail store, for the mail order and shipping department. Hence we are well prepared to fill orders promptly and correctly the day they are received in nearly all cases.

OUR PRICES. In comparing our mail prices, especially on heavy seeds, such as Peas, Beans and Corn, by the pound and two pounds, and other seeds by the pound and one-fourth pound, bear in mind that we pay the postage, unless otherwise noted.

ORDER EARLY. It is important to order as soon after you get the Catalogue as convenient, then you will have your seeds at hand for planting when you want them; besides, if you want seeds in large quantities, they can be sent by freight much cheaper than by express. **Small orders**, however, can often go by express as cheaply.

LARGE ORDERS. Any Dealer, Market Gardener, Institution or any Individual wishing seeds in large quantities is requested to mail us a list of what is wanted and we will promptly return it to you with the very lowest prices marked. **A letter of inquiry may save you dollars** if you want to buy in quantity.

SMALL ORDERS. If you want only a single packet, do not hesitate to order it. We take as much pains with small orders as with large ones. Small True Blue Seed orders are sure to grow larger.

SHIPPING ORDERS. When goods are to be shipped by freight or express, give plain shipping directions; otherwise we use our best judgment.

BE FREE TO WRITE US for any information pertaining to our business, on a separate sheet of paper from your order, as your letter goes to the general office and your order to Mail, Express, or other departments.

WE URGE customers to inform us promptly on the arrival of orders if anything proves otherwise than expected. We aim to make friends of our customers and mail orders receive the same careful attention that customers do over our counters, but we are only human and errors sometimes (though not often) occur. When they do we are willing and anxious to rectify them.

OUR SEED ANNUAL. Please show this Seed Annual to your friends, and if you should receive an extra copy be kind enough to hand it to some neighbor interested in seeds, who will be pleased to get it. We will be glad to send a copy free to any of your friends likely to want seeds, in this or any other country. In return we will ask you to speak a good word for us to your friends and neighbors. An order this season, no matter how small, secures our catalogue for next season as soon as issued.

CHANGE OF ADDRESS. If you have changed, or intend to change your address, please let us know, and we will change it on our books, so that you will receive our Seed Annual at your new postoffice.

If you have Rural Mail Delivery be sure to give the Name and Number of your Route, if necessary, when ordering.

GUARANTEE. Complaints made that seeds are not good should quite as often be attributed to other causes as to the quality of the seeds. There are contingencies continually arising to prevent the very best seeds always giving satisfaction, such as sowing too deep, too shallow, in too wet or too dry soil; insects of all descriptions destroying the plants as soon as, or before, they appear; wet weather, cold weather, frosts; chemical changes in the seeds induced by temperature, etc. Soil preparation for the reception of seed is very important. If not properly done, seed with very high germination is bound to perish. For all these reasons, it is impossible to guarantee seeds under all circumstances, and, while we exercise the greatest care to have all seeds pure and reliable, we give no warranty, express or implied, as to description, quality, productiveness or any other matter of any Seeds, Bulbs, or Plants we send out, and we will not be in any way responsible for the crop. If the purchaser will not accept the goods on these terms, they should not be ordered. We test all our seeds before sending them to our customers, and should they fail to grow, if promptly and properly tested by the customer, will replace the same amount or give value in others. We cannot afford, knowingly, to send out seeds doubtful as to vitality or purity, and you can get no better stocks of any seedsman, even though he deceitfully professes to warrant seeds. We have thought best to be frank in regard to this matter so there could be no misunderstanding. A guarantee from an irresponsible seedsman is of no value whatever.

ABOUT PARCELS POST

WE give below a Parcel Post rate table for the convenience of those wishing goods sent by mail in larger quantities than are quoted "postpaid" herein. Bear in mind however that we pay the postage or express charges, unless otherwise noted, on all seeds up to and including pounds (Beans, Corn and Peas two pounds). The price on other items does not include prepayment of this charge except as noted.

The rate for Seeds, Bulbs Plants and Books is 1 cent for each two ounces up to 8 ounces regardless of distance. Over 8 ounces the pound zone rate applies	Local Zone City of Cols. and its rural routes Postage required	1st Zone Not over 50 miles from Columbus Postage required	2nd Zone 51 to 150 miles from Columbus Postage required	3rd Zone 151 to 300 miles from Columbus Postage required	4th Zone 301 to 600 miles from Columbus Postage required	5th Zone 601 to 1000 mi. from Columbus Postage required	6th Zone 1001 to 1400 mi. from Columbus Postage required	7th Zone 1401 to 1800 mi. from Columbus Postage required	8th Zone Over 1800 miles from Columbus Postage required
Over 8 oz. up to 1 lb.	5c	5c	5c	6c	7c	\$0.08	\$0.09	\$0.11	\$0.12
Over 1 lb. up to 2 lbs.	6c	6c	6c	8c	11c	.14	.17	.21	.24
Over 2 lbs. up to 3 lbs.	6c	7c	7c	10c	15c	.20	.25	.31	.36
Over 3 lbs. up to 4 lbs.	7c	8c	8c	12c	19c	.26	.33	.41	.48
Over 4 lbs. up to 5 lbs.	7c	9c	9c	14c	23c	.32	.41	.51	.60
Over 5 lbs. up to 6 lbs.	8c	10c	10c	16c	27c	.38	.49	.61	.72
Over 6 lbs. up to 7 lbs.	8c	11c	11c	18c	31c	.44	.57	.71	.84
Over 7 lbs. up to 8 lbs.	9c	12c	12c	20c	35c	.50	.65	.81	.96
Over 8 lbs. up to 9 lbs.	9c	13c	13c	22c	59c	.86	1.13	1.41	1.68
Over 9 lbs. up to 10 lbs.	10c	14c	14c	24c	43c	.62	.81	1.01	1.20
Over 10 lbs. up to 11 lbs.	10c	15c	15c	26c	47c	.68	.89	1.11	1.32
Over 11 lbs. up to 12 lbs.	11c	16c	16c	28c	51c	.74	.97	1.21	1.44
Over 12 lbs. up to 13 lbs.	11c	17c	17c	30c	55c	.80	1.05	1.31	1.56
Over 13 lbs. up to 14 lbs.	12c	18c	18c	32c	59c	.86	1.13	1.41	1.68
Over 14 lbs. up to 15 lbs.	12c	19c	19c	34c	63c	.92	1.21	1.51	1.80
Over 15 lbs. up to 16 lbs.	13c	20c	20c	36c	67c	.98	1.29	1.61	1.92
Over 16 lbs. up to 17 lbs.	13c	21c	21c	38c	71c	1.04	1.37	1.71	2.04
Over 17 lbs. up to 18 lbs.	14c	22c	22c	40c	75c	1.10	1.45	1.81	2.16
Over 18 lbs. up to 19 lbs.	14c	23c	23c	42c	79c	1.16	1.53	1.91	2.28
Over 19 lbs. up to 20 lbs.	15c	24c	24c	44c	83c	1.22	1.61	2.01	2.40
Over 20 lbs. up to 21 lbs.	15c	25c	25c						
Over 21 lbs. up to 22 lbs.	16c	26c	26c						
Over 22 lbs. up to 23 lbs.	16c	27c	27c						
Over 23 lbs. up to 24 lbs.	17c	28c	28c						
Over 24 lbs. up to 25 lbs.	17c	29c	29c						
Over 25 lbs. up to 26 lbs.	18c	30c	30c						
Over 26 lbs. up to 27 lbs.	18c	31c	31c						
Over 27 lbs. up to 28 lbs.	19c	32c	32c						
Over 28 lbs. up to 29 lbs.	19c	33c	33c						
Over 29 lbs. up to 30 lbs.	20c	34c	34c						
Over 30 lbs. up to 31 lbs.	20c	35c	35c						
Over 31 lbs. up to 32 lbs.	21c	36c	36c						
Over 32 lbs. up to 33 lbs.	21c	37c	37c						
Over 33 lbs. up to 34 lbs.	22c	38c	38c						
Over 34 lbs. up to 35 lbs.	22c	39c	39c						
Over 35 lbs. up to 36 lbs.	23c	40c	40c						
Over 36 lbs. up to 37 lbs.	23c	41c	41c						
Over 37 lbs. up to 38 lbs.	24c	42c	42c						
Over 38 lbs. up to 39 lbs.	24c	43c	43c						
Over 39 lbs. up to 40 lbs.	25c	44c	44c						
Over 40 lbs. up to 41 lbs.	25c	45c	45c						
Over 41 lbs. up to 42 lbs.	26c	46c	46c						
Over 42 lbs. up to 43 lbs.	26c	47c	47c						
Over 43 lbs. up to 44 lbs.	27c	48c	48c						
Over 44 lbs. up to 45 lbs.	27c	49c	49c						
Over 45 lbs. up to 46 lbs.	28c	50c	50c						
Over 46 lbs. up to 47 lbs.	28c	51c	51c						
Over 47 lbs. up to 48 lbs.	29c	52c	52c						
Over 48 lbs. up to 49 lbs.	29c	53c	53c						
Over 49 lbs. up to 50 lbs.	30c	54c	54c						

Insured Parcel Post

Packages up to \$25.00 in value will be insured for their full value on payment of a fee of 5 cents for each package in addition to the regular post rates. Packages in value over \$25.00 will be insured for their full value, but not to exceed \$50.00 for a fee of 10 cents for each package in addition to the regular Parcel Post rates. If you desire your package insured, send the insurance fee in addition to the amount you send to pay for the goods—and be sure to mention same on your order.

Weight Limit

In the local, first and second zones, packages will be delivered by Parcel Post, weighing up to 50 pounds. In the third to eighth zones the weight limit is 20 pounds.

Size Limit

The size of the parcel in no case is to exceed 72 inches in length and girth combined. In other words, the circumference of the parcel at its thickest part, plus its length, must not exceed 72 inches.

Returning Goods

Should you ever find it necessary to return goods by Parcel Post, never put a letter or any money in the package, as that would make the whole shipment bear a first-class postage charge. Never seal a Parcel Post package, or place a stamp over the string. Always put your name and address in the upper left-hand corner.

Farmers Record and Account Book

No man can conduct a business successfully with haphazard methods much as a man with his eyes closed.

Farming is no exception—if no records are kept as to operations, etc., the farmer is going at it blindly. Are you, Mr. Farmer, in a position to say where your profits are coming from, and what causes your losses, without relying on the all too uncertain guessing?

You may be keeping a herd of cows that are not bringing you profits—you may be deriving a larger profit from your cows than any other part of your stock or land.

To put yourself on a sure basis should be your actions, and we are willing to help you.

We have a book that will put you straight and tell you at any time just how you stand if you will spend the time to make an entry or two a day. It is a complete

system of farm recording, but requires no technical knowledge of bookkeeping to keep your records accurately.

The book contains 48 pages and ruled forms are provided for all classes of account needed in keeping the farm records. Also full explanation of how the accounts are to be figured and several pages of useful tables, etc.

48 pages, 7x10, paper cover, price, postpaid, 25c.

Ornamental Pomegranate,

"Queen Ann's Pocket Melon"

Grows on a pretty vine; its handsome fruit is a lemon-yellow, striped with dark orange, varying from the size of a small peach to that of an orange. Very fragrant, sweetly perfuming a room with their pleasant odor for days. Very prolific and easily grown. Packet, 10c.

Novelties and Specialties for 1918

You will find under this heading new varieties worthy of trial, and others of such value as to warrant our giving them special mention. A vast number of novelties are offered each year which, after growing on our trial grounds, prove no better than standard varieties, if as good, so that in line with our policy of furnishing the best seeds procurable we endeavor to furnish in new types, only such as have made good on our trial grounds. There are varieties which, while not new in the strictest sense of the word, are of recent introduction and demand special notice as being much superior to ordinary types, and these we hope our customers will try along with some of the novelties, all of which will prove of interest and aid in the development of a more productive and profitable garden.

Livingston's Hardy Wax Bean

Can Be Planted Early — High Quality — Stringless

You can't find a stronger or more healthy grower than this variety. It resists disease and grows in spite of unfavorable weather, and when it comes to quality they are unsurpassed in their class. We made pretty strong claims for Livingston's Hardy Wax when we first introduced it, but we haven't taken back a word that we said. It is of great value either for market or home garden. Hardy Wax is a good shipper and its great beauty makes it salable anywhere. Pods are very solid, meaty and tender, absolutely stringless and of fine flavor. Pkt., 15c.; $\frac{1}{2}$ lb., 30c.; lb., 50c.; 2 lbs., 95c.; $\frac{1}{2}$ pk. (7 $\frac{1}{2}$ lbs.), \$2.20; pk., \$3.80; bu., \$14.00.

W. E. Vail, Westchester Co., New York, writes October 6, 1917: "Livingston's Hardy Wax Bean is an upright robust grower, resisting disease and unfavorable weather, also rust proof and very productive. We think your claim for this bean is exactly a true one. Livingston's Early Sugar Corn is a very good variety and will soon become popular."

"Sure Crop" Stringless Wax Bean

Hardy—Blight-Resistant—Fleshy, Stringless Pods

Plants are very thrifty and hardy. Thick, leathery leaves resist blight admirably and help this sort to stand a remarkable amount of dry weather.

Sure Crop Stringless Wax in the Bean "par excellence" for dry sections. Pods average 6 inches long, are flat, thick and fleshy and entirely stringless. Pkt., 15c.; $\frac{1}{2}$ lb., 30c.; lb., 55c.; 2 lbs., \$1.00; $\frac{1}{2}$ pk. (7 $\frac{1}{2}$ lbs.), \$2.45; pk., \$4.25.

Livingston's
Hardy Wax

Chinese Cabbage

Also Known as "Celery Cabbage," "Odorless Cabbage," "Chinese Lettuce," etc. Introduced into this country from China. A new vegetable for the United States. It is a species of cabbage, with a fine delicate flavor, resembles a stalk of celery more than a cabbage head. It is as tender as head lettuce and once introduced becomes a great favorite and is in great demand for numerous dishes such as salads, cole slaw, and it can be eaten raw, or it may be cooked quickly.

Culture, Storing for Winter, etc., are same as for Cabbage. Our experience is that Chinese Cabbage can not be grown successfully as a Spring crop. For Fall crop, seed should be sown early in August in rows and when plants are proper size, thinned out so that they will stand about 15 inches apart. We offer two varieties, as follows:

Pe Tsai—Produces a long slender head, often measuring 20 inches in length, outer leaves light green, inside is of a beautiful creamy yellow, very solid heads. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.30; lb., \$4.50.

Wong Bok—The heads of this sort are shorter and of greater diameter than the above and average heavier. Wong Bok is more savory leaved than Pe Tsai, thus bespeaking fine quality. We believe it is a surer header than the above sort. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 45c.; $\frac{1}{4}$ lb., \$1.40; lb., \$5.00.

Copenhagen Market Cabbage

Everybody who grows Cabbage is familiar with the Danish Ball-Head or Hollander, a Winter Cabbage grown for market more extensively than any other variety. The Copenhagen Market is an early Danish Ball-Head. It matures with the Wakefields but is of larger size. We have tested out many varieties alongside of it and it was not only the earliest Cabbage, but every plant developed a fine solid head. For full description see page 18. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.10; lb., \$5.25.

Chinese Cabbage—Wong-Bok

Three Fine Celeries

Livingston's Snowwhite Celery

BEAUTIFULLY WHITE, CRISP AND TENDER

Splendid for Family Use

The new Snowwhite is a pure-white, self blanching variety, introduced by us in 1902 after five years of careful selection and improvement. It is without a rival in purity of color. The originator says on this point: "In the season of 1900 I set 7000 plants of Snowwhite and found seven green stalks; in 1901, three thousand plants and only one green stalk; and in 1902, six thousand plants and not a single stalk that was not pure white. It does well where others fail."

Mr. E. J. Hollister, the noted Celery grower, and author of a book on Celery Growing, also says: "The pearly whiteness of the stalks of your Snowwhite Celery denotes good constitution, and together with the size, strength and number of the stalks, makes a perfect picture."

In vigor of growth, ease of blanching, size, richness of flavor, crispness and purity, it is ideal. Our picture, made from a portion of a photograph of one dozen stalks, gives some idea of the beauty of this variety, but not of the size. The dozen stalks weighed 20 pounds.

Single stalks sometimes weigh 2½ pounds, and quite frequently 2 pounds. It grows solid on all kinds of soil and keeps better than a great many of the best standard varieties.

Pkt., 10c.; ½ oz., 25c.; oz., 45c.; ¼ lb., \$1.35; lb., \$4.50

Livingston's Snowwhite

Mr. Jacob Barry, Luzerne Co., Pa., writes us: "In regard to the Snowwhite Celery, it is all O. K. Out of the half-pound seed from you I only had one plant that went to seed, and did not have any green stalks; and from the 5000 plants I bought of you I had no green stalks; as far as I saw every one was perfect. It is the easiest Celery to blanch I ever handled, and will stand as much cold weather as any of the self-blanching sorts; and it is a good seller."

Mrs. F. D. Bowers, Pa., writes: "You have not given Snowwhite Celery half the praise it deserves."

Mr. G. E. Terrill, Conn., writes: "Your Snowwhite Celery is Perfection. I ate the last of mine March 26. It was stored in a warm cellar, so you can recommend its keeping qualities."

Columbia

Columbia

An early maturing sort, unsurpassed in shape and quality. The plant is of medium height, but very stocky and haevy. The stalks are thick, almost round, resembling in shape those of Giant Pascal; the color has in it more of the rich yellow tint of Golden Self-Blanching, which variety it resembles very much in appearance when trimmed and bunched for market. The foliage is of a distinctly light shade of green with a tinge of yellow. In season it follows in close succession Golden Self-Blanching. In quality is certainly exceptionally fine, some considering it equal or even superior to either Golden Self-Blanching or Giant Pascal. Pkt., 10c.; ½ oz., 20c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

Easy Blanching

A variety of comparatively recent introduction which promises to take rank with some of the leading standard sorts. The plant is of medium size and a very robust grower, having broad thick stalks with shallow ribs. It is very tender and crisp and the quality is exceptionally fine. The originator makes the claim that Easy Blanching excels most of the standard sorts in long keeping qualities. Pkt., 10c.

CELERY CULTURE

A good book on the growing of this very important crop may aid to success and prevent expensive mistakes. We offer one of 143 pages, size 5x7 inches, with plenty of pictures, by W. R. Beattie, bound in cloth, price 60c., postpaid.

General list of Celery Seed of all standard varieties of real merit, see page 22.

The Four Best Golden or Yellow Sweet Corns

Livingston's Earliest on Earth

Earliest of the Golden Sorts

(See illustration below.) Records on our trial grounds for the past four years show it is to be earliest of all including such well-known extra-early varieties as "Peep O' Day," "Golden Bantam," "Nordheims," "Premo," and all strains of Cory. Planted May 25, it was ready for market in 62 days. It is about a week earlier than Golden Bantam. Having 10 to 12 rows of grains, gaps in the ears are prevented. Ears run about 6 inches in length in roasting ear stage. Are produced on short stalks. On account of extreme earliness, other crops may be easily secured on same ground the same season. Pkt., 10c.; $\frac{1}{2}$ lb., 45c.; 2 lbs., 80c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.75.

Extra-Early Golden Bantam

Quality Unsurpassed.

One of the finest. Ears are from 6 to 8 inches long, eight rowed, filled with broad, sweet, golden yellow kernels of a delightful flavor. It is quite hardy and will stand planting early. It is as early as the Cory and of much better flavor. It is **always** good, whether planted in the Spring or during the Summer. We confidently advise all lovers of a real good Sweet Corn to give "Golden Bantam" a trial. The way to find out how good it is is to try it; plant enough, or you'll be sorry when you begin to eat it. Pkt., 10c.; $\frac{1}{2}$ lb., 25c.; 1 lb., 40c.; 2 lbs., 70c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.50; pk., \$2.75; bu., \$10.00.

Golden Cream

A Golden Country Gentleman

The good old Country Gentleman Sweet Corn has always been recognized as the sweetest of all the late varieties. Since the introduction of the Golden Bantam it has easily taken the lead as the sweetest of the Extra Early sorts. Now in this New Golden Cream we have the two united, retaining all the sweetness and fine flavor of both, also the color of Golden Bantam, but lighter yellow, and the irregular rows of Country Gentleman. The Golden Cream matures later than Golden Bantam. Quality very fine—sweet and tender. Pkt., 10c.; $\frac{1}{2}$ lb., 25c.; 1 lb., 45c.; 2 lbs., 80c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.75; pk., \$3.25.

Bantam Evergreen

Golden Bantam Crossed with Stowell's Evergreen

A new variety of golden or yellow Sweet Corn introduced a few years ago and one which has proven itself a decided success with the market man as well as the home gardener. In size it is not so much of a "nubbin" as Golden Bantam and yet not as large as its other parent. In crossing these two excellent varieties none of the good qualities of either has been lost; rather it surpasses them in sweetness and tenderness. While not an extra early sort it comes in just right in season to follow the first early sorts. We predict this corn to become one of the leading sorts once its good qualities are generally known and advise all lovers of Sweet Corn to at least give Bantam Evergreen a trial. Pkt., 10c.; $\frac{1}{2}$ lb., 25c.; 1 lb., 45c.; 2 lbs., 80c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.75; pk., \$3.25.

Golden Sweet Corn Collection

One packet each above four fine Golden varieties. Coming into bearing from extra early until Fall, only 30c., postpaid.

Golden Bantam

Golden Cream

Livingston's Early Sugar

Livingston's Early Sugar Sweet Corn

A distinct and valuable addition to the early Sweet Corns. As compared with other good early sorts, it has bigger ears with more even rows which are invariably filled well to the tip. Ears average 3 inches long by $2\frac{1}{4}$ inches in diameter, have from 10 to 12 rows of deep, broad, pearly white kernels of delightfully sweet flavor which is not surpassed by any other early kind. Sixty per cent. of the stalks carry two well-developed ears which are usually placed from 2 to 3 feet above the ground. A remarkable characteristic of Livingston's Early Sugar is the exceptionally strong husk which protects the ears from ravages of insects. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; 1 lb., 35c.; 2 lbs., 60c.; $\frac{1}{2}$ pk. (6 lbs.), \$1.20; pk., \$2.00; bu., \$7.50.

Livingston's New Tom Thumb Pop-Corn

A great many people like to grow Pop-Corn, but there is so much difference in the popping qualities of the various varieties that one hesitates to offer anything in this line unless it has real merit. In this variety we have a dwarf growing corn, a heavy yielder of attractive ears, peculiar in form, but the grain is very similar to the best strain of White Rice Pop-Corn. The ears are short and thick, and run very uniform. Of a pearly white and the grain is of excellent popping quality and flavor after being popped. We recommend Tom Thumb, believing it will give general satisfaction. Pkt., 10c.; $\frac{1}{2}$ lb., 25c.; lb., 40c.; 2 lbs., 75c.

Honey Dew Musk Melon

A Delicious New Melon Offered for the First Time Last Season

Its name has been well chosen, as it is about as sweet as Honey. The average size is about six inches in diameter, and they weigh five to six pounds. The skin is smooth with little netting, and of creamy yellow when ripe. The flesh is a beautiful green next to the outside rind shading to light green at the center. It is very thick, melting, fine grained and can be eaten almost to the rind, and the seed cavity is quite small.

The Honey Dew is not easily bruished and stands shipping long distances. It matures a few days later than the Rocky Ford, is very prolific, crops of 8,000 to 10,000 melons per acre having been reported. It is easily pulled from the vine, when fully ripe, and will keep for several weeks. The late maturing fruits are said to have kept until Christmas. We have seen fruits of Honey Dew matured on the vines in Michigan and ripe fruits were shipped to us from Colorado; hence it is certain to mature over a wide range. We strongly advise, however, that it be planted quite early and if possible start in berry boxes or pots in the hot-beds, setting to the field when all danger of frost is past. Give Honey Dew a trial this season. You will no doubt be pleased. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 30c.; $\frac{1}{4}$ lb., 85c.; lb., \$3.00.

Livingston's Tom Thumb Pop Corn

Livingston's Tip-Top Muskmelon

(Introduced by Us in 1892)

TIP-TOP IN QUALITY—TIP-TOP IN APPEARANCE—TIP-TOP IN PRODUCTIVENESS

This splendid melon has "held its own" for many years against all introductions in the melon line, and no yellow-fleshed melon of which we have any knowledge compares with it in good qualities. The testimony of all who have used **Tip Top** is that every melon produced, whether big or little, early or late, is a good one—sweet, juicy, finest flavor, firm (but not hard) fleshed, and eatable to the outside coating. Its appearance on the market is very attractive—sells on sight. Customers soon learn to pick them out and will have no other variety. Fruit of large size, and flesh attractive bright salmon in color; nearly round, evenly ribbed, moderately netted, very productive. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Livingston's Ohio Sugar Musk Melon

A Green-Fleshed Tip Top

Livingston Ohio Sugar Melon is an absolutely distinct and very superior Melon. It is the result of careful hybridizing and pains-taking selection and breeding. It is one of the sweetest and most luscious green-fleshed cantaloupes now on the market. It is of that desirable size in demand in all markets; round, inclined to oval in shape, heavy in proportion to size because the flesh is deep. It is distinctly ribbed and thickly netted—color of skin grey-green. Because of its firm flesh and solidity, it is a splendid shipper. Seed cavity is small. It is no lottery to select a good **Ohio Sugar Melon**. They are all good, sweet and deliciously clear to the rind. It is the rarest exception that an under-quality Melon is found. The flesh is an attractive green of exquisite texture, sugary, juicy, tender, and entirely free from any stringiness. Handsome and uniform shape; every Melon a good one. It has become a popular market and home-garden Melon. Produces good Melons on a great variety of soils.

The vines are of luxuriant and vigorous growth, yielding bountifully through the season. Pkt., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Livingston's Ohio Sugar Muskmelon

New Pea Market Surprise

A Large Podded Extra Early

We have something new in Peas to offer our customers this year. It is a large podded, prolific Extra Early, called Market Surprise. It is as early as Livingston's First in Market, but more prolific. The pod is larger, measuring about $3\frac{1}{4}$ inches in length and $\frac{3}{4}$ inches in width; the picking season a little longer than that of First in Market. The seed resembles that of First in Market, in color, while it is not quite as smooth, nor yet is it a wrinkled pea. We would describe as "dimpled." We believe you will do well to try some of the Market Surprise this season. We haven't a great quantity of the seed, but want our customers to find out how good it is and be ready for larger quantities in 1919. As a sort to follow, Extra Early Alaska it should prove a dandy good one. Pkt., 15c.; $\frac{1}{2}$ lb., 25c.; lb., 40c.; 2 lbs., 75c. By express, not paid, $\frac{1}{2}$ pk., \$1.65; pk., \$3.00.

A Kruhm of Long Island, writes July 2, 1917: "The Market Surprise Pea is a wonder, as early as Pedigree Extra Early, with pods twice as large and twice as many of them (like Thomas Laxton) on our sandy Long Island soil. It yielded a peck of well filled pods from a 12 foot row in 56 days after planting and one picking cleaned the row."

Peter Pan Pea

A very promising new early sort with big Dark Green pods and peas.

Produces large pods filled with peas of highest quality. It has vigorous growing large dark foliage standing about 15 to 18 inches in height. The Peter Pan Pea is the "last word" in this class of large podded dwarf growing dark green foliage, pods and peas. Packet, 15c.; $\frac{1}{2}$ lb., 30c.; lb., 50c.; 2 lbs., 95c.; $\frac{1}{2}$ pk., \$2.25; pk., \$4.00.

DO NOT FORGET TO ORDER NITROCULTURE INOCULATOR FOR PEAS. (See page 59.)

Buttercup

Buttercup Pea

A Grand New Medium Early Pea—An Improved Carters Daisy

In this grand variety we have a large podded Wrinkled Pea comparing in size and quality with Telephone, Boston Unrivalled and Alderman, but the vines, while very thrifty and vigorous, only grow from 16 to 20 inches high and bear great crops of big pods filled with deliciously flavored Peas. In season, Buttercup comes between Premium Gem and Telephone, hence valuable as a market variety. Buttercup is a few days earlier than Carter's Daisy. A much better cropper and the pods fill quicker. Pkt., 15c.; $\frac{1}{2}$ lb., 25c.; lb., 40c.; 2 lbs., 75c.; $\frac{1}{2}$ pk. (7 lbs.), \$1.60; pk., \$2.75.

Royal King

Royal King is very thick-meated, averaging about as thick again as the old Ruby King and others of the Bell type. It is perfectly sweet and free from pungency. It is a heavy bearer and a good shipper. One party says, "We have grown and shipped thousands of bushels of this pepper in the past and could often make sales of it in markets that were glutted with other sorts." Pkt., 15c.; $\frac{1}{2}$ oz., 30c.; oz., 50c.

A New Garden Book for 1918 "Home Vegetable Gardening"

By ADOLPH KRUEH of the Garden Magazine

With gardening as a patriotic duty, thousands who made the start last year will be delighted to have this book to help make their 1918 garden a bigger success. This book tells, in a practical way just how to proceed with a garden, sowing of the seed, kind of soil best for the different vegetables, lay out, etc. It is just what you need to assist you with your garden, whether you are an amateur or an old hand at the business. A book of about 300 pages fully illustrated with more than 200 photographic reproductions, also 32 four-color illustrations. Cloth bound. Price \$1.35, postpaid. Order a copy today.

We Could Produce "Cheaper" Seeds

than those offered by us, but that would not be serving our customers right. "True Blue" stands for highest quality. We aim to grow the best seeds that brains, soil and climate will produce—for the sake of the man who plants them.

Peter Pan

Royal King

Livingston's Prolific Yellow Pepper

Sweet Salad Pepper (Pimento)

ALSO KNOWN AS PERFECTION

The following is the description of the introducers of this valuable new sort: "This Pepper is of the 'Pimento' type (see illustration alongside), and has been brought up to a degree of perfection which we have not found in any other strain or variety that we have ever seen or grown. We are large growers of peppers of both the 'Bell' and 'Pimento' types. We have also given considerable attention to the crossing and selection of varieties, all of which have resulted in some valuable improvements. But the results have shown that there is not a single variety that we have tested that is in any respect equal to 'Perfection'."

Sweet Salad Pimento

This Pepper is especially desirable for canners. It is also fine for the home garden, both green and ripe. It is so smooth and uniform in shape that the skins can be easily slipped off after burning over a hot fire a few seconds or by boiling a few minutes in hot water. It can also be pared like an apple by using a sharp knife. The green peppers can be pared best in this way. The hull or meat is from two to three times as thick as that of the old "Bell" types, and yields about a half more edible product to the same measurement.

Quality very sweet and delicious and entirely free from pungency. Color when ripe a beautiful scarlet red. Very productive, yielding heavy crops until cut off by frosts. It is largely grown by canners for pimentos, pickles and pulp. Pkt., 10c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

Livingston's Prolific Yellow Pepper

VERY EARLY, VERY PRODUCTIVE, VERY MILD

Introduced by Us in 1914. (See illustration above)

Immensely productive, of bright yellow fruits of the most convenient size for stuffing. Comes into bearing much sooner than the mammoth sorts, and is the surest crop of all. It may be used for stuffing while yet green. We secured a small amount of the seed of this variety some years ago from one of our gardener customers and after carefully selecting it so as to produce fruits true to type, we offered it for the first time in 1914.

On account of the mildness and thick walls of Livingston's Prolific Yellow Pepper, it is one of the finest for use in salads or pickles. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.15; lb., \$4.00.

World Beater Pepper

Said to be a cross between Ruby King and Chinese Giant. The shape is like Ruby King only the blossom end is broader and the size nearly equal to Chinese Giant. The plant is a strong, vigorous grower and very prolific. The fruit is a beautiful scarlet in color and exceedingly mild. The flesh is thick and firm, making this variety an excellent shipper. Pkt., 10c.; ½ oz., 25c.; oz., 40c.; ¼ lb., \$1.35; lb., \$4.75.

New Saxa Radish

Bright Scarlet, Small Top and Root

This variety is of a beautiful scarlet color, round as a marble and having a very small top and tap root. It comes so quick that it has been placed on the dining table in three weeks from the time of sowing seed. The flesh of the New Saxa is very crisp, brittle and juicy, and remains in fit condition for the table for a long time. It is adapted to sowing in open ground as soon as it can be worked, and it is a fine sort for greenhouse crops, for which it was especially developed. Pkt., 10c.; ½ oz., 15c.; oz., 25c.; ¼ lb., 75c.

Buying Seeds

Is and always will be a matter of confidence. Even the most experienced planter cannot tell from a mere examination of the seeds whether they are of strong vitality and produce the desired crops or whether they are the veriest rubbish. In no other business does "a man's word" count as much as in the seed business. Thousands of the most critical planters in this country take our word for it that "True Blue Seeds" are the best money can buy.

New Saxa Radish

A Cluster of Livingston's Manyfold Greatly Reduced. Every Fruit of Marketable Size

Livingston's Manyfold Tomato---New Last Year

Brightest Red Inside and Out. Earliest Big Red Sort. Heavy Cropper

In the introduction of new varieties of Tomatoes we have felt that it was due to our customers that there should be some points of superiority over existing varieties. We annually test a lot of sorts offered by others and in many cases have been disappointed. There was no real good reason for their introduction.

It has been a number of years since we sent out the Livingston's Coreless, the last one of the Livingston varieties to be introduced, although we have been continuously at work on various crosses and selections, and have been solicited by Seedsmen, Cannermen and Gardeners many times each season for something new in Tomatoes. A majority have asked for a sort that would hold up the

size and productiveness of some of our large standard varieties and yet would come into bearing a week or two earlier. In our new **Livingston's Manyfold Tomato** we have come pretty close to it. It has a brilliant, bright-red fruit that averages almost equal in size to Livingston's Stone, and fully as productive, if not more so, but begins bearing earlier, hence lengthening the bearing season when used along with the larger and later sorts. The fruit is borne in large clusters which generally average five or more to the cluster. On 133 plants grown on trellises at our True Blue Farm the past season, we counted 442 clusters having five fruits and upwards. Almost invariably all of the fruits are of marketable size. Last season owing to unfavorable conditions Manyfold ran small on some soils, but where conditions were more favorable it came up fully to our description and claims. The flesh of the Livingston's Manyfold Tomato is one of the richest reds we have ever seen. Even the pulp surrounding the seed, in most specimens, shows the red coloring. We consider this point of high color, together with early maturity of a very large percentage of the crop, should appeal very strongly to Cannermen and makers of catsup, and equally so to private users of Tomatoes.

Livingston's New Manyfold Tomato is the most promising of all recent introductions. We have faith in it, and know you will not regret using it in your crop for this season. Packet, 35c.; half size packet, 20c.

Mrs. E. W. Tinker, Portage Co., Ohio, writes Sept. 23, 1917: "The Manyfold Tomato Seed I bought of you this season surpassed any tomatoes I have ever raised. They weigh from a pound to a pound and a half. I will have to refuse to give the seed to many people here. I want to raise a lot of them next year. They have a fine flavor, in fact we never had tomatoes anything like the Manyfold."

G. A. Baglin, Carmi, Ill., writes May 25, 1917: "Your 'Manyfold' Tomato is all that you claim it is. In fact, it is ahead of Earliana and bears out your statement along the claim of earliness in fruit-setting. I have plants that have clusters of fruit set while Earliana and Globe are not yet producing more than blooms. All were planted the same day. I am going to keep a record of ripening and will advise you further."

Livingston's Manyfold Natural Size

New Aster-Sensation

1398—This new sort is the darkest red of all Asters. The plant averages about 18 inches high and is of the true branching type. Stems are long and stiff, making it ideal for cutting. The flower is very double and averages about three inches in diameter. On account of the deep velvety-red color of Sensation, it is exceptionally fine for either bedding or border. Pkt., 10c.

New White Oriental Poppy

2334—It is the most distinct "Break" that has yet been made in Oriental Poppies, it being a pure satiny white with a bold crimson blotch at the base of each petal, unquestionably the most important addition to the list of hardy perennial seeds. Like most hybrids the seedlings are liable to vary some in color, but a good percentage can confidently be expected to come true. Pkt., 15c.

Aster, Sensation

Chinese Woolflower

2696—A new flower belonging to the Celosia family and one which promises to become popular. The plants average about 18 inches to two feet in height and shoot many laterals each of which form an oval shaped flower-head. The flower is of a beautiful shade of crimson and resembles, somewhat, a ball of wool. It is a very free bloomer continuing in flower until killed by heavy frost. Pkt., 15c.

We receive hundreds of testimonials each season from customers who are more than satisfied with our "True Blue" Quality Seeds. In appreciation of these words of praise we strive at all times to keep our stock up to the highest possible standard.

Salvia
Ostrich Plume

Chinese Woolflower

Salvia New Ostrich Plume

2385—This new variety is the most beautiful of Salvias of recent introduction. Its habit of growth resembles that of the Splendens type, but produces a Plume quite similar in form to Ostrich Plume Celosia. One Plume alone is a bouquet itself, quite a per cent of the flowers are double and this is the only Salvia up to the present time that is double. The color is somewhat different from all other Salvias, being of a rich, glossy, dark scarlet. By very careful selection and severe roguing for the past three seasons, this variety now runs very true to type. Pkt., 15c.

Mrs. J. H. Astle, Rich Co., Utah, writes: "Your Tall or Climbing Nasturtiums cannot be spoken of too highly, for they provided a gorgeous mass of bloom all Summer long, with little or no care. I am sending another order for Flower Seeds, for I believe your seeds are 'True Blue.'"

Partial View of Our True Blue Seed Farms and Trial Grounds

LIVINGSTON'S "TRUE BLUE" VEGETABLE SEEDS

In our Vegetable Seed Department we have listed only such varieties as are of real merit, having rigidly excluded all sorts that are not of value, and have cut out a number of out-of-date varieties.

We make thousands of tests each year in our Trial Grounds to ascertain similarity of variety, so as not to offer the same sorts under different names.

Cultural directions will be found at the heading of each class of vegetables, and also on most of our packets. These directions, while reliable, will not apply in every detail to the extreme sections of the United States, and therefore some allowance must be made for the difference in latitude.

We also send free to our customers, on application, a cultural leaflet—"The Vegetable Garden," which is of value to beginners.

"True Blue" Seeds

are "quality seeds." Our trial grounds prove to us every year that our strains are as good as the best and better than many good strains. Still, every year we learn and try to produce better seeds than those offered the year before.

Spargel **Asparagus** Esparragos

It can be grown in any good garden soil, but does best in sunny, moist soil. To grow plants from seed, sow in drills about one inch deep in rows one foot apart. Keep the soil mellow and free from weeds; during the Summer thin out, and the following Spring plants may be set in

the permanent bed. Set the plants one foot apart each way, ten inches below the surface, spreading the roots well apart. Cover with about three inches of soil and as plant grows fill in the trench. One ounce of seed will sow 60 feet of drill. About 400 plants to the ounce. Leaflet with Cultural directions free to customers.

Columbian Mammoth White—A distinct variety, producing shoots which are white and remain so long as fit for use. Vigorous and robust in habit; grows large shoots. Needs no earthing up. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Early Argenteuil—A splendid early French variety of large size and green in color; excellent flavor. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Palmetto—Large, dark green variety of vigorous growth, having pointed tips. Early. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Conover's Colossal—Large and rapid grower of excellent quality; color, green. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Broccoli **Broccoli** Spargelkohl

This plant is very closely allied to the Cauliflower, the variation being very slight. It is generally considered rather more hardy, however. In growing Broccoli, a seed bed should be prepared and the seed sown in May. The plants will be ready to transplant late in June or early in July, and should be set in very rich mellow ground, in rows about 2½ feet apart, leaving 18 inches between the plants.

Early Large White—Heads medium size, close and compact. One of the most certain to head. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00.

Early Purple Cape—Rather hardier sort; greenish purple heads; good flavor. Pkt., 10c.; oz., 30c.

Brussels Sprouts

Col de Bruxelles

Rosenkohl

A species of the Cabbage family, which produces miniature heads from the sides of the stalk. These heads are a great delicacy, boiled in the same way as Cauliflower. The seed should be sown about the middle of May, in a seed bed, and the plants afterwards set in rows 2 feet or more apart, and cultivated like Cabbage.

Improved Dwarf—Produces compact sprouts of the finest quality; a good keeper. Pkt., 5c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

Pride of Denmark—A fine new variety, growing about 3 feet tall. Sprouts develop along entire stalk at one time, lower ones being as good as those at top. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Borecole, or Kale—See Kale, page 30.

Pride of Denmark
Brussels
Sprouts

Livingston's Garden Beans

Our strains of Beans are exceptionally fine. They are produced by the best growers in this country, who make a specialty of growing them for seed purposes. The fields are carefully rogued each year, the seed is hand picked, so that our stock will be found first-class.

Bean Prices include postage, up to two pound quantities. If the larger quantities are wanted sent by mail it will be necessary to remit additional amount at the Parcel Post rates. Refer to page 3 for rates.

Two pounds (one quart) will plant 100 feet of drill; 1 to 2 bushels to the acre.

Wax Podded Dwarf Varieties

Keeney's Rustless Golden Wax

(See Illustration)

A strong grower; free from rust. Pods meaty and well filled, semi-round, rich yellow, fine quality; **entirely stringless**. Pkt., 15c.; $\frac{1}{2}$ lb., 30c.; lb., 50c.; 2 lbs., 95c. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$2.25; pk., \$4.00.

Improved Golden Wax

Grennell's. One of the best strains of Golden Wax. Hardy, prolific, of best quality; pods straight, thick, and vines very erect. Pkt., 15c.; $\frac{1}{2}$ lb., 30c.; lb., 50c.; 2 lbs., 95c. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$2.25; pk., \$4.00.

Davis White Wax

Very productive, white-seeded, rustless, string or snap variety. A good variety for shipping. The dry white Beans are good for cooking purposes. Pkt., 15c.; $\frac{1}{2}$ lb., 40c.; lb., 70c.; 2 lbs., \$1.30. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$2.60; pk., \$4.50.

Round Pod Kidney Wax

Pods are round. Plants grow strong and sturdy, with long, round, handsome stringless pods of large size, very solid and full of meat; crisp, brittle. Wonderfully early and productive and has become very popular. Pkt., 15c.; $\frac{1}{2}$ lb., 40c.; lb., 75c.; 2 lbs., \$1.40. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$2.75; pk., \$4.75.

New Kidney Wax

Pods are flat, but thick and fleshy. They average 6 to 7 inches in length, are borne in large clusters and make the finest show on the market bench on account of their rich lemon-yellow color and straight, handsome shape. In quality unsurpassed. Is brittle and stringless at all stages of development. Crop short. Pkt., 15c.; $\frac{1}{2}$ lb., 35c.; lb., 65c.; 2 lbs., \$1.20.

Green Podded Bush Beans

Hopkin's Earliest Red Valentine

One of the earliest and most prolific round green podded Beans. Comes into bearing earlier than the Extra Early Valentines, is a wonderful producer and a perfect shipper. Remains in good condition a long time after picking. Pkt., 15c.; $\frac{1}{2}$ lb., 25c.; lb., 45c.; 2 lbs., 85c. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$1.90; pk., \$3.50.

Full Measure

A very desirable round-podded variety with pods six to seven inches long, which are solid, meaty, brittle and stringless. It is a little later than Stringless Green Pod and is a splendid Bean for home or market use. Pkt., 15c.; $\frac{1}{2}$ lb., 25c.; lb., 45c.; 2 lbs., 85c. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$1.90; pk., \$3.50.

Livingston's Round Six Weeks

Extra-early; strong grower and abundant cropper. Pods green, very fleshy, free from strings when young. Pkt., 15c.; $\frac{1}{2}$ lb., 25c.; lb., 40c.; 2 lbs., 75c. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$1.65; pk., \$3.00.

Stringless Green Refugee

(See Illustration)

Planters everywhere will at once recognize the wonderful merit of this new Bean when it is stated that in addition to the superior qualities of the old Refugee or 100 to 1, this new sort is absolutely stringless. It has every quality desirable in a bush bean—true bush habit, 18 inches high, unusually productive. The pods are round, very handsome, and average over 5 inches in length. They are fleshy, tender, brittle and entirely free from strings at all stages of growth. This splendid bean is becoming displace the old Refugee. Pkt., 15c.; $\frac{1}{2}$ lb., 30c.; lb., 50c.; 2 lbs., 95c. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$2.25; pk., \$4.00.

Livingston's Pencil Pod Wax

Although hardy, it is stringless, tender and of fine quality. Pods smooth, perfectly round and straight. In points of vigor, hardness and productiveness, it is superior. Pkt., 15c.; $\frac{1}{2}$ lb., 40c.; lb., 70c.; 2 lbs., \$1.30. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$2.60; pk., \$4.50.

German Black Wax

Pencil Pod Strain—Pods are long, fleshy, round, waxy yellow, solid and tender; very early. Pkt., 15c.; $\frac{1}{2}$ lb., 40c.; lb., 75c.; 2 lbs., \$1.40. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$2.75; pk., \$4.75.

Wardwell's Kidney Wax

Immensely productive. One of the handsomest Wax Podded Beans. Early; vine medium, erect, hardy, productive. Pods long, broad, flat, brittle and of a delicate waxy yellow. Very attractive market sort. Crop short. Pkt., 15c.; $\frac{1}{2}$ lb., 40c.; lb., 75c.; 2 lbs., \$1.40. By express, not paid, $\frac{1}{2}$ pk. ($7\frac{1}{2}$ lbs.), \$2.75.

Livingston's Hardy Wax—See Novelty pages.

Sure Crop Wax—See Novelty Pages.

Stringless Green Refugee

Keeney's
Rustless
Golden
Wax

Green Podded Beans (Continued)

Prices of Beans Include Postage up to and Including 2 pounds.

Bountiful

(See illustration). A green pod Bush Bean, which comes into bearing very early and continues throughout the season. Pods beautiful rich green, very thick, broad, long and uniform; meaty, tender, fine quality; absolutely stringless. Good shell Bean for Winter use. A splendid market variety. Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 90c. By express, not paid, ½ pk. (7½ lbs.), \$2.00; pk., \$3.70; bu., \$13.50.

Giant Stringless Green Pod—Has a much larger pod than Stringless Green Pod, or about one-third larger than the Valentine—average 5 inches long. Full and fleshy, extremely crisp and absolutely stringless; very early and prolific. Pkt., 15c.; ½ lb., 40c.; lb., 70c.; 2 lbs., \$1.30. By express, not paid, ½ pk. (7½ lbs.), \$2.60; pk., \$4.50.

Refugee or 1000-to-1—Fine quality, medium late. Prolific; nearly round. Our strain is extra fine. Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 95c. By express, not paid, ½ pk. (7½ lbs.), \$2.25; pk., \$4.00.

Extra Early Refugee—Hardy; an abundant bearer. Ten days earlier than Refugee or 1000-to-1. Pkt., 15c.; ½ lb., 25c.; lb., 45c.; 2 lbs., 80c. By express, not paid, ½ pk. (7½ lbs.), \$1.80; pk., \$3.25.

Hodson "Green Podded"—Entirely unaffected by rust or blight; an exceptionally strong and robust grower; enormous yielder, often producing 50 to 60 later than Refugee or 1000-to-1. Excellent shipping sort. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.

Stringless Green Podded

(See illustration). One of the finest extra-early Beans in cultivation and one that has held its place in spite of many new introductions for which superior qualities were claimed. It produces in profusion long, straight, round, deeply saddle-backed pods early in the season. The pods are absolutely stringless at all stages of growth, brittle, tender and of real good flavor. Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 90c. By express, not paid, ½ pk. (7½ lbs.), \$2.00; pk., \$3.70; bu., \$13.50.

Black Valentine—Very hardy; resists unfavorable weather and disease. Long, straight, green pods of fair quality, enormously productive. Ready for market in 50 days from sowing. Pkt., 15c.; ½ lb., 25c.; lb., 45c.; 2 lbs., 80c. By express, not paid, ½ pk. (7½ lbs.), \$1.75; pk., \$3.25; bu., \$12.00.

Dwarf Horticulture—Speckled Cranberry. Splendid for Shell Beans. Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 95c. By express, not paid, ½ pk. (7½ lbs.), \$2.25; pk., \$4.00.

Improved Navy or Boston Pea Bean—Very productive variety. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c. By express, not paid, ½ pk. (7½ lbs.), \$1.65; pk., \$3.00.

White Marrow—Good green or dry. Standard Soup Bean. Pkt., 15c.; ½ lb., 25c.; lb., 45c.; 2 lbs., 85c. By express, not paid, ½ pk. (7½ lbs.), \$1.90; pk., \$3.50.

White Kidney, or Royal Dwarf—Pkt., 15c.; ½ lb., 25c.; lb., 45c.; 2 lbs., 85c. By express, not paid, ½ pk. (7½ lbs.), \$1.90; pk., \$3.50.

Bush Lima Beans

These varieties are of true Bush or Dwarf form, growing but 18 to 20 inches high, without supports. About two weeks earlier than the Pole Lima Beans. Sure croppers. Abundant bearers until frost. Plant in rows 2 to 3 feet apart and a foot apart in the rows.

Burpee's Improved

This has uniformly larger pods than Burpee's Bush Lima, while the pods contain more Beans, which are thicker and remain green even in the dry stage. The plants are very prolific, bearing pods in clusters of from 5 to 7. The individual pods average 5 to 6 inches long and contain from 5 to 7 Beans. The Beans are exceedingly thin-skinned and of delightful flavor. They almost "melt in your mouth," to use a popular expression. Pkt., 15c.; ½ lb., 50c.; lb., 80c.; 2 lbs., \$1.40. By express, not paid, ½ pk. (7 lbs.), \$2.80; pk., \$5.00.

Bountiful

Fordhook

The Fordhook is entirely distinct in habit of growth. The stiffly erect bushes branch freely and bear tremendous crops. It is ready for use as early as the popular Burpee's Bush Lima, but the Beans are much plumper and remain green much longer. The shelled Beans are very fat, are closely packed in the pods, which shell very easily. Pods are borne in clusters of from 4 to 6, average 4 to 5 inches long and contain usually 4 tender Beans of a delightful flavor. Pkt., 15c.; ½ lb., 50c.; lb., 80c.; 2 lbs., \$1.50. By express, not paid, ½ pk. (7 lbs.), \$3.20; pk., \$5.50.

From Mrs. Isaac Keist, McLean County, Ill.: "I have been planting your seed for several years and would have no other kind. Your New Kidney Wax Bean is certainly grand. The best for canning I ever tried. I am sending an order with this letter."

New Wonder or Quarter Century

Pods about the same as Burpee's Bush Lima; Beans slightly smaller; a few days earlier and fully as productive. A sure cropper. Very true to bush form. An immense yielder. Pkt., 15c.; ½ lb., 30c.; lb., 55c.; 2 lbs., \$1.00. By express, not paid, ½ pk. (7 lbs.), \$2.45; pk., \$4.25.

Burpee's Bush Lima—Bushes are of stout growth, branching so vigorously that each plant makes a large bush. Immense yielder of well-filled pods of large Beans of luscious flavor. Pkt., 15c.; ½ lb., 30c.; lb., 55c.; 2 lbs., \$1.00. By express, not paid, ½ pk. (7 lbs.), \$2.45; pk., \$4.25.

Henderson's Bush Lima—Compact bush form, and produces large crops. Delicious flavor. Beans are smaller than above sorts. Pkt., 15c.; ½ lb., 30c.; lb., 55c.; 2 lbs., \$1.00; By express, not paid, ½ pk. (7 lbs.), \$2.40; pk., \$4.25.

Mrs. E. Longworthy Burwell, Jr., Dane Co., Wisconsin, writes: "Having grown your seeds since 1909 in both Massachusetts and Wisconsin, I will say that I have always had uniformly good success, and that for high purity, high germination and best results, I believe no seeds are equal to yours."

Stringless
Green Podded

Pole Lima Beans

Lima Beans will not grow until the weather and ground are warm. If planted before, they are almost sure to rot in the ground. See cultural directions for Pole beans. **Prices on Beans include postage up to and including two pounds.**

Siebert's Early

One of the very best for market gardeners. The result of a number of years' selecting to largest green Beans and easily opening pods. Very productive, hardy and vigorous. Produces pods early, and continues to the last of the season. The great Beans are of immense size, but so tender and succulent that they shrink in drying to about the size of the original White Lima. Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 95c. By express, not paid, ½ pk. (7 lbs.), \$2.25; pk., \$4.00.

Early Leviathan

Of superior quality. Wonderfully productive. The ideal Pole Lima. Earliness is often obtained at the sacrifice of other valuable features, but in this variety we claim superiority, not only in this respect, but in size of Bean and pod and enormous productiveness. Pkt., 15c.; ½ lb., 30c.; lb., 55c.; 2 lbs., \$1.00. By express, not paid, ½ pk. (7 lbs.), \$2.45; pk., \$4.25.

Carpenteria Large Green-Seed

An excellent variety with many unique characteristics. Vines are of strong, vigorous growth, setting many pods, which are closely filled with large, fat Beans, much thicker than those of the ordinary Pole Limas. Pods contain 3 to 4 Beans, which retain the green tint in the dry state—a sure indication of fine quality. Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 95c. By express, not paid, ½ pk. (7 lbs.), \$2.25; pk., \$4.00.

King of the Garden

Vigorous grower, pods containing five to six large Beans, which are of fine quality. The vines grow strong and yield heavily. A very fine variety. Pkt., 15c.; ½ lb., 30c.; lb., 55c.; 2 lbs., \$1.00; By express, not paid, ½ pk. (7 lbs.), \$2.45; pk., \$4.25.

Dreer's Improved

Beans thick, sweet and tender; of medium size. Especially good for the home garden. Very productive. Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 95c. By express, not paid, ½ pk. (7 lbs.), \$2.25; pk., \$4.00.

Sieva, or Small Lima

Early, and the small Beans are of luscious flavor. Fine sort for the kitchen garden. Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 95c. By express, not paid, ½ pk. (7 lbs.), \$2.25; pk., \$4.00.

Pole or Running Beans

The Pole or Running varieties are tender and should be sown two weeks later than Bush Beans. They succeed best in sandy loam, which should be liberally enriched with manure. **Two pounds will make 100 to 200 hills, according to size of the Beans.**

Kentucky Wonder or Old Homestead

An old favorite, with long, fleshy, deeply saddle-backed pods. Very prolific, producing an abundance of fine, stringless, crisp pods until late in the season. Of best quality. Pkt., 15c.; ½ lb., 25c.; lb., 45c.; 2 lbs., 85c. By express, not paid, ½ pk. (7½ lbs.), \$1.90; pk., \$3.50.

Early Golden Cluster Wax—Splendid Snap Bean. Vines strong and hardy; very early and continues bearing until frost. Pods are golden yellow, stringless and tender. Pkt., 15c.; ½ lb., 50c.; lb., 80c.; 2 lbs., \$1.40. By express, not paid, ½ pk. (7½ lbs.), \$2.80; pk., \$5.00.

Powell's Prolific—A most desirable green-podded Snap Bean. Bears profusely, is quite early, and continues until frost. Very strong grower, one plant filling a pole with a mass of vines densely loaded with handsome pods. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c. By express, not paid, ½ pk. (7½ lbs.), \$1.65; pk., \$3.00.

Kentucky Wonder Wax

Quite similar to the Kentucky Wonder or Homestead Green Pod except in the color of pods, which in this one are light waxy yellow. It has a thick, broad pod, very tender, of delicious flavor and stringless. The pods often attain a length of 8 to 9 inches. It begins bearing when the vines are only a few feet in height, hence its earliness, and, therefore a sort well adapted to maturing a crop where seasons are quite short. Pkt., 15c.; ½ lb., 50c.; lb., 80c.; 2 lbs., \$1.40; ½ pk. (7½ lbs.) \$2.80; pk., \$5.00.

Lazy Wife—Pods 6 to 8 inches long, quite stringless; a good white Shell Bean for Winter. Pkt., 15c.; ½ lb., 35c.; lb., 60c.; 2 lbs., \$1.15. By express, not paid, ½ pk. (7½ lbs.), \$2.75; pk., \$5.00.

Speckled Cranberry—Old "Bird Egg." Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 95c. By express, not paid, ½ pk. (7½ lbs.), \$2.25; pk., \$4.00.

Ky. Wonder Wax

Kentucky Wonder

Garden Beets for Table Use

Beets are one of our specialties and we grow acres of them for seed at our Kirkersville farms, first growing the roots from seed; holding these over and then making careful selection of the roots in the Spring, when ready to plant. This enables us to offer a very superior strain of Beet Seed.

The soil best suited for the culture of the Beet is that which is rather light, provided it is thoroughly mixed with manure. If wanted very early, sow in hotbeds and transplant; but for main crop sow in the Spring, as soon as the ground becomes fit to work, in drills 18 inches apart, $\frac{1}{2}$ inch deep. For Winter use, the Turnip varieties may be sown as late as June and the seed covered two inches. When the plants are 3 to 4 inches in height, thin out so that they stand 3 or 4 inches apart. Keep free from weeds by frequent hoeing and hand-weeding if necessary. Before freezing weather sets in the roots may be stored in cellars or pits, same as potatoes; dry earth thrown over them before the straw is put on insures their keeping over Winter. Do not bruise them in handling. One ounce of seed will sow 50 feet of drill; 5 to 6 pounds to the acre.

Detroit Dark Red

This superb variety is one of the most popular red Turnip Beets, not only for market gardeners, but for home use. It is also one of the best for canning, making a strikingly handsome product, far superior to that obtained from any other variety. The small top, early maturing and splendid shape and color have made it a favorite. Top small, upright growing, so that the rows may be close together; leaf stem and veins dark red, blade green; root globular and very smooth (see illustration); color of skin dark blood red; flesh deep, bright red, zoned with a darker shade, very crisp, tender and sweet, remaining so for a long time. Very uniform in shape, color and quality. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Dewing's Improved Blood Turnip—The leading main crop variety. Roots always smooth, handsome, good size, tender and sweet. An enormous crop. A favorite with marketmen. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Extra-Early Dark Red Egyptian—Very early, dark blood red, medium size, tender and sweet; fine for kitchen gardens. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Bastain's Early Blood Turnip—The largest of the turnip-shaped Beets. Tender and sweet. The flesh is somewhat lighter in color than other sorts. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Crosby's Improved Egyptian Beet

A very superior beet. Of handsome form, good size, few small tops, very small tap root, fine quality and a rapid grower. The shape is very desirable, not quite so round as the Eclipse. See illustration. Takes on its turnip shape and looks well in the very early stages of its growth, on which account it is preferred for first early crop to the Globe and Half-Long varieties. Being a rapid grower, it may be sown outside as late as July.

We have made a very fine selection of our stock for years and we believe have it nearer the original Crosby idea than any one in the trade. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

WRITE FOR SPECIAL PRICES ON LARGE QUANTITIES OF BEET SEED.

Mr. H. A. Loshbaugh, of Berrien County, Michigan, writes under date of March 27th, as follows: "I was well pleased with Seed last year, and will give you an order for Vegetable Seed as soon as I get your quotation on Potatoes."

**Crosby's
Egyptian**

**Dewing's
Improved
Blood
Turnip**

Albert Schmidt, Philadelphia, writes: "Your Crosby's Egyptian Beet seed purchased from you were very early, and all that would be desired as far as eating was concerned."

Jay Carpenter, New York State, writes: "Those Crosby Beets were very fine. All about the same size, and the earliest I had."

Garden Beets for Table Use (Continued)

Extra-Early Eclipse

An early beet especially desirable for the home garden and used for bunching. The tops are small. The roots are bright deep red, smooth, round or slightly top shaped, with a small tap and small collar. The flesh is bright red, zoned with pinkish white, very sweet, crisp and tender, especially when young. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.40.

Edmand's Blood Turnip—Very uniform. Root is always smooth, round and handsome; top small; of good marketable size and among the best for table use. Color dark red; crisp, tender and sweet; good keeper. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Crimson Globe—Root of medium size, very handsome, globe shape, and has a remarkably smooth surface. Both the skin and flesh are deep, rich red, fine grained, sweet and tender in all stages of growth. Small tap root; leaves are small, dark green. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Lentz's Early Blood Turnip—A great favorite with market gardeners around New York and Philadelphia. Of a rapid growth; fine form, exceedingly sweet and delicious. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Half-Long Blood Red—Of handsome shape, fine quality, quick growth; good for Winter use if planted late. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Long Dark Blood Red—A good keeper of good size, flesh dark blood red. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Swiss Chard or Spinach Beet

A peculiar variety of Beet, of which the leaves only are used. It does not make a large root, but the leaves are splendid "greens" when cut young, and are equally delicious when allowed to mature. The broad, white leaf-stalks or mid-ribs are cooked and served like Asparagus. Produces continually from July until Fall. Can be had throughout the Summer when Spinach cannot be grown. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Extra Early Eclipse

Swiss Chard Lucullus—An improvement over the common variety. The plants grow from 2 to 2½ feet tall and consist, when fully developed, of about a dozen creamy white, attractively curled leaves. These leaves are carried on broad, thick stalks, about 12 inches long. Take the leafy portion of the plant and cook it like Spinach. Prepare the stalks as you would asparagus. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Mangel-Wurzels

An ever-increasing acreage is being planted to stock Beets, because of the wonderful results from feeding them. Fattening breeding and milk cattle do equally well on them. About one-fourth of the daily rations should be of roots. Sow in rows 2½ to 3 feet apart as soon as the ground can be thoroughly worked. Cover seed about 1 inch, making ground firm over the seed. When 4 inches high, thin to 8 inches apart.

Beets cannot stand being frozen, so should be harvested before cold weather sets in. Remove the tops down to about one inch, leaving the tap roots on. When the roots are thoroughly dry, make a cone-shaped pile upon a slightly scooped out, well-drained spot, and cover with a layer of straw or leaves, three or four inches thick. Cover this with only enough soil to hold the litter and shed water, until colder weather, when more soil should be added to prevent severe freezing. Six pounds sow one acre.

Mammoth Long Red

Also called Norbiton Giant, Jumbo Mangel, Colossal, etc.—A favorite with the farmer and dairyman; large, well-formed; blood-red color; very nutritious; a big cropper. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Golden Tankard

Very productive and sweet; flesh yellow; tops and neck very small; easily pulled. Especially relished by sheep and cows. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Golden Giant Intermediate

Yellow Leviathan, or Mammoth Yellow—Beautiful russet yellow; skin smooth; flesh white, firm, sweet; productive; easily pulled; good keeper. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Yellow, or Orange Globe

Very productive; easily pulled; fine keeper; spherical shape; orange-yellow color. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Sugar Beets

Sugar beets are not as heavy yielders as the Mangels, but contain a large amount of sugar. They are excellent for feeding cows.

Lane's Imperial

Especially good for stock feeding. Large, smooth, fine grained and very sweet. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Klein-Wanzleben

This splendid sugar Beet is one of the greatest milk-producing roots known. The yield is not quite equal to Mangels, yet the feeding value is superior. Contains the greatest amount of sugar of any. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Giant Half-Sugar Rose

Yield nearly as much per acre as Mangel Wurzels, and the roots are of much higher nutritive value. Roots grow partly out of ground and are easily harvested. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Giant Half-Sugar White

Similar to above, only white. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Monroe Canning & Packing Co., Monroe County, Mich., writes: "The Detroit Dark Red Beet Seed purchased from you last season produced the finest Beets we have ever grown."

Howard H. Hoover, Oklahoma, writes: "The Ed-mund's Blood Turnip Beets were the finest I ever saw. They were smooth and large. All the seed obtained of you has been satisfactory."

J. E. Bricker, Indiana Co., Pa., writes: "I have always found your seeds of finest quality and perfect germination. Two years ago I bought of you ten bushel of Swedish Select Oats and raised the best oats I ever raised in my experience. Last spring I sold the whole crop except my own seed at a good advance above the best market price for seed oats."

Giant Half Sugar

Col repollo **Livingston's High-Bred Cabbage Seed** Weisskraut

Cabbage requires deep, rich, mellow soil, high manuring and good culture to obtain fine, solid heads. For early use, sow seeds of the early kinds in the hot-beds or in a box in the house the last of January or early in February; transplant into the open ground in April, in rows 2 feet apart and 18 inches in the row; or sow a bed of seed outside as soon as the soil can be worked. Transplant in about four weeks. For second early Cabbage, sow in April and transplant in May. For late Cabbage, sow in May and transplant in July in rows 3 feet apart and 2 feet in the row. In transplanting, it is important that plants be set down to the first leaf, so that the stem may not be injured in case of frost. Be careful not to cover the heart of the plant. Hoe every week and stir the soil deep. As they advance in growth draw a little earth to the plants until they begin to head. To prevent splitting or bursting, so frequently over the ground and push every Cabbage that appears about to mature over sideways, which will break some of the roots and check its growth. To prevent attacks of the caggabe fly on small plants, dust thoroughly with plaster, air-slacked lime or wood ashes. For cabbage worm, try Hammond's Slug Shot. One ounce of seed produces about 2500 plants. Four ounces will grow enough plants to set an acre.

Chinese Cabbage (Pe Tsai), Celery-Cabbage, Odorless Cabbage, etc., see novelty pages.

Early Jersey Wakefield

This Variety Should be Grown in Every Garden.

Many market gardeners consider this the very best Early Cabbage in cultivation. Certainly deserving of its great popularity. Grown extensively for market and shipping. Its merits are many, among which are large heads for an early sort, small outside foliage and uniformity of crop. Pyramidal in shape, having a blunted or rounded peak; very solid, fine texture and sweet. The seed we offer is first-class, sure to give satisfaction. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.25.

Early Jersey Wakefield

Large Charleston Wakefield

A selection from Early Jersey Wakefield, only it is about one week later than that popular early variety and grows much larger heads, often averaging 8 to 10 pounds. As solid as Early Winningstadt. There are immense quantities grown in the South for Northern markets. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.25.

All Season (Vandergaw)

Greatly improved strain of Early Dwarf Flat Dutch. A very desirable large cabbage of intermediate season, adapted for autumn as well as late summer use, and considered one of the most desirable for kraut. The plants are very vigorous and sure heading, with few outer leaves which are large and fairly smooth or slightly waved. The heads are nearly round or somewhat flattened, very solid and of excellent quality. It is remarkable for its ability to stand the hot sun and dry weather, remaining an exceptionally long time in condition for use. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.00.

Glory of Enkhousen

It is very early and large, always extremely solid and fine ribbed—more so than any other kind. Once known, it will hold its own with the market gardeners and home growers alike. In our judgment it excels in flavor all varieties known to us. It is an exceedingly tender, fine grained, and as a cropper no early Cabbage will approach it. Planted side by side with Early Jersey Wakefield, under the same conditions, the former produced heads of marketable size five to six days earlier, and in size fully double that of the Early Jersey Wakefield. Glory of Enkhousen Cabbage is more solid and better flavored and keeps in fine condition much longer. It is very dwarf and compact, allowing of close planting. Heads fine, ball-shaped, and with few outside leaves. Size ideal for marketing. An extra good cropper on account of extra size over many other first early sorts. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.00.

Surehead

One of the most reliable main crop or late cabbages for northern latitudes, being very hardy and exceptionally sure heading. In some sections this is used largely as a late home market cabbage and for shipping. The plants are rather upright, with many outer leaves which are waved, thin edged, crimped and distinctly frilled; stem rather short. The heads are large and broad, thick, somewhat flattened, compact, very solid and of excellent quality. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.00.

Copenhagen Market

A splendid new extra-early round-headed sort which matures as early as the Wakefields and is of much larger size. Each plant forms a perfect, tightly folded head, averaging five to eight pounds in weight and about eight inches in diameter each way. The compact growth of the plant, the solidity of the head, its excellent flavor, and extreme earliness—all combine to make Copenhagen Market one of the most meritorious Cabbages that have come to our notice in a decade. See specialty pages also. Pkt., 10c.; ½ oz., 25c.; oz., 40c.; ¼ lb., \$1.40; lb., \$5.25.

Eureka First-Early

In comparison with Early Jersey Wakefield, Eureka First Early is heavier, hardier, earlier, and has flat head. Forms head fit for market 5 days earlier than Early Jersey Wakefield. Its shape and excellent table qualities make it a favorite with consumers. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.00.

Early Spring

As early as Early Jersey Wakefield. Will yield one-third more than any other extra-early Cabbage on same area. Plant 21 inches apart and you have 13,000 per acre. Has the peculiarity of heading firmly even before fully grown. Also flat-headed, making it valuable for extra-early market or home use. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.00.

Early Winningstadt

(The Old Standby)—Well known and popular Cabbage. In season very close to Early Jersey Wakefield. Heads large, decidedly conical. Solid, even in Summer; almost worm-proof, because so hard. A very sure header. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.25.

Early Dwarf Flat Dutch

Excellent second early variety; producing fine, large heads. Highly valued for its fine quality and ability to resist heat. Heads very solid, broad, round, flattened on top, tender and fine-grained. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.00.

T. P. Rhoades, Telfair Co., Ga., writes: "I can get all the seeds I want almost at my door, but I would not have them as a gift. I've seen the elephant and he's a big one."

Mr. J. T. Cobb of Riley County, Kansas, writes: "Both of my orders arrived O. K. in fine shape, and as fine looking seed as I ever saw. I thank you for promptness and high quality."

Surehead

Henderson's Early Summer

About 10 days later than the Early Jersey Wakefield, but, being fully double the size, may be classed with best large Early Cabbages. Equal in weight to most of late varieties; may be planted nearly as close as Early Jersey Wakefield. Keeps long time without bursting. Heads round. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Autumn King or World Beater

One of the finest strains of late Cabbage. It produces regular, even heads of enormous size; a great cropper on account of few outside leaves. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Succession

About one week later than the Henderson's Early Summer, but nearly double the size, while it can be planted nearly as close, its outer leaves being unusually short. A very sure header. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Fottler's Short-Stem Brunswick

Rapid grower; large, solid heads, few outside leaves; planted early, is ready for use in July; planted late, is a choice Winter sort. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Danish Summer Ball-Head

In Danish Summer Ball-Head we have a variety coming between the Copenhagen Market and the regular type of Danish Ball-Head. The season of this new Cabbage is about the same as Henderson's Succession, it being a mid-season or Summer Cabbage, and the good things said about Copenhagen Market can be applied to this new Cabbage of true ball-head type. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.50.

All-Head Early

A thoroughbred sort of remarkably uniform size and shape and sure heading qualities. Deep, flat heads, solid and uniform in color, shape and size. In tenderness unsurpassed. For Winter use, sow in July. By reason of its compactness, 1000 more heads can be obtained from an acre than any other good-sized varieties. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.50.

Livingston's Premium Flat Dutch

Years ago we set out to build up a strain of Large Late Flat Dutch Cabbage that would be better than any other on the market, and now we have it in our **Livingston's Premium Flat Dutch**. Our purpose has been to weed out every objectionable point, and to fix firmly every good quality. It produces many tons to the acre, because of its solidity and compact, snug manner of growth. Unlike most

large sorts, it is solid to the heart. Our stock seed is always grown from heads (not from stalks after the heads are taken off), fully developed and perfect in every respect. This strain has no superior. **The heads are large and very solid; open, white, are crisp and tender, and sure to head.** Grown largely by marketmen on account of its good shipping qualities. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

The
Volga

The Volga (No. 20)

This variety is of the greatest uniformity. In a field of several acres frequently not a single plant shows any variation from a true and valuable type. In some respects it is a vegetable wonder, as the heads are about equal in size and shape, weighing from 12 to 15 pounds each, round as a ball, the largest measuring about 12 inches in diameter either way. Unlike most varieties, the heads are perfectly solid, and the stem does not run up into the head; the flesh is exceedingly firm, tender and white. In respect to hardness, we have never seen a type which would favorably compare. This type will mature its heads fully two weeks earlier than any of our late growing kinds. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Louisville Drumhead

About Cincinnati and Louisville it has been grown for more than 40 years. Heads very large and solid; a sure header; will stand without bursting almost the entire Summer. For Winter use, sow late in the season. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

LIVINGSTON'S PREMIUM FLAT DUTCH.

Danish Ball Head

Tall Stem This splendid variety is well known for its remarkable solidity and grand keeping qualities. So great has been the demand among the users of Cabbage for this fine-grained sort as to render its importation from Denmark a most profitable enterprise for the vegetable dealer. The heads are very heavy and superb in quality. The extra weight, in limited space, will be appreciated by those who grow for distant markets, ship in car loads and sell by weight. This variety has been sold under a number of different names, such as "Hollander," "German Export," "Dutch Winter," etc., but the correct name is "**Danish Ball-Head.**" Pkt., 10c.; ½ oz., 25c.; oz., 40c.; ¼ lb., \$1.40; lb., \$5.00.

Danish Ball-Head

Short Stem The head is quite similar to the above, but has shorter stem. Less outer foliage and better able to resist blight. Stands hot weather better than the tall stem. Pkt., 10c.; ½ oz., 25c.; oz., 40c.; ¼ lb., \$1.40; lb., \$5.00.

Savoy Cabbages

The Savoy or Curly Cabbages are of exceptionally fine flavor and quality, and should be more generally cultivated. They are particularly adapted for private use, where quality rather than quantity is considered. Most delicious after frost.

Small Early Savoy—Best Early Dwarf Savoy; heads firm, solid and beautifully crimped; finest quality. Pkt., 10c.; ½ oz., 25c.; oz., 40c.

Improved American Savoy—Superior to the ordinary Drumhead Savoy offered under different names. Heads large and finely curled; short stalk; a compact grower; sure header; keeps well. Best for main crop. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25.

Improved American Savoy

Livingston's Ideal Winter

(See Illustration.) A few days earlier than Livingston's Premium Flat Dutch, and one of the most magnificent strains of Late Flat Dutch known today. By persistent selection, year after year, it has been brought to a state of perfection rarely attained. The large, solid heads, the low, short stems, the absence of useless foliage, uniformity of size and shape, reliability for heading, and long-continued selection mentioned above, all combine to make this the **Ideal Cabbage** for

profit. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.00.

Large American Drumhead

A superior Fall and Winter variety; large heads. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.15; lb., \$4.00.

Red Cabbages Danish Ironball (Red)

As round as a ball and as hard as iron—those are the two leading characteristics of this elegant new sort. Heads grow to a large size, averaging 8 inches in diameter, of rich purplish color throughout. Pkt., 10c.; ½ oz., 25c.; oz., 40c.

Extra-Early Blood Red Erfurt

Earliest and reddest. Pkt., 10c.; ½ oz., 25c.; oz., 40c.

Mammoth Rock Red

Heads as large as Large Late Flat Dutch; deep red to center. Highly recommended. Hard as a rock. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25.

Danish Ironball (Red)

James Guldner, Schuykill Co., Pa., writes Oct. 10, 1917: "I have drawn first prize at the Fair this year on Ohio Sugar Melon. I have Melons 6½ inches through, planted June 2nd. Good yielder. Summer was too short for melons as we had frost Sept. 15th. Some were planted on the hill and some in the valley, all frosted. Will try next year. The Early Sugar Corn is fine, planted June 29th, fine ears. Summer was not favorable, sometimes too much rain, not much sunshine, then a month or more too dry and cold nights and early frost."

J. P. Morgan, of Morris County, writes as follows: "I tried three Seed Houses for the new Stone Tomato, but I never got it, until last year, and I got it of the Livingston Seed Company. Thanks."

Mr. William C. Tarbell, Jackson County Mich., writes: "Please send me your Fall catalogue. The seeds received from you this spring are the wonder of our neighborhood, especially the tomatoes, of which the Magnus lead."

Livingston's Earliest Cauliflower

Dry-Weather Cauliflower

(Also known as **Danish Giant** and **Gilt-Edge**.) This is a fine, large, heavy variety that matures about a week later than Livingston's Earliest Cauliflower. It is especially adapted for growing in dry locations on account of its large leaves, which furnish greater protection to the heads. $\frac{1}{2}$ size pkt., 15c.; pkt., 25c.; $\frac{1}{4}$ oz., \$1.00; $\frac{1}{2}$ oz., \$1.75; oz., \$3.25; $\frac{1}{4}$ lb., \$8.50.

Livingston's Green-House Forcer

For a great many years we have realized that a variety of Cauliflower that would grow in a small space, and, at the same time, combine all the good qualities of our best sorts would be greatly appreciated by every one who forces this vegetable under glass. Livingston's Green-House Forcer is unexcelled for this purpose. $\frac{1}{2}$ size pkt., 15c.; pkt., 25c.; $\frac{1}{4}$ oz., \$1.00; oz., \$3.25.

Henderson's Early Snowball

One of the best types of Cauliflower on the market. Its compact habit of growth renders it a very profitable variety to force under glass, and it does well for late planting, as well as for early crops. It is a sure header. $\frac{1}{2}$ size pkt., 15c.; pkt., 25c.; $\frac{1}{4}$ oz., \$1.00; $\frac{1}{2}$ oz., \$1.75; oz., \$3.25.

Berro Cress or Pepper-Grass Kresse

A well-known pungent salad; can be used alone or with lettuce. Requires to be sown thickly (covering very lightly) at frequent intervals, to keep up a succession, as it soon runs to seed.

Extra Curled

Pepper Grass—May be cut two or three times. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.

Water Cress

Well-known hardy perennial aquatic plant. Is easily grown along margins of ponds and streams, where it increases both by spreading of roots and seeding. Has a pleasant, pungent flavor. Growing Water Cress should prove a profitable enterprise where the conditions are favorable. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.

Upland Cress

This is a hardy perennial; stays green nearly the whole year; ready for use in the Spring before any other salad. Eaten like lettuce or boiled like Spinach. Sow in April in rows 1 foot apart. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.

Corn Salad or Fetticus

A vegetable used as a salad. Sow the first opening of Spring for Summer use in rows 1 foot apart and it is fit for use in six or eight weeks.

Larged Leaved—Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.

Coliflor Cauliflowers Blumenkohl

Cauliflowers delight in a rich, moist soil, and in dry seasons should be abundantly watered, especially when heading. Sow the seed in the hotbed in January or February, and transplant the plants 2 or 3 inches apart in boxes or in another hotbed, until such time as they are safe to be planted in the open ground. Set the plants in the field 2 feet by 15 inches apart. If properly hardened off, they are seldom injured by being planted out too early. When heading, tie the outside leaves loosely over the head to protect it from the sun. One ounce produces from 1500 to 2000 plants.

Livingston's Earliest

Our grower in Denmark spares no pains or expense with this stock. For wintering in cold-frames it can not be excelled and it does equally well for a Fall crop if planted late and treated the same as late Cabbage. Livingston's Earliest Cauliflower should take the place of many of the late varieties on account of its fine texture, pure white heads, and large uniform size. A most compact grower and a sure header. Market gardeners throughout the country are perfectly satisfied with it.

Price (under our True Blue Seal), $\frac{1}{2}$ size pkt., 15c.; pkt., 25c.; $\frac{1}{4}$ oz., \$1.00; oz., \$3.25.

Danish Perfection

It is similar in growth to Livingston's Earliest, but is even earlier, coming eight to ten days ahead of it, on the introducer's grounds. It is extremely uniform in type, the heads very solid and the introducers state that the leaves fold so closely about the head that it blanches finely with very little trouble on the part of the grower. $\frac{1}{2}$ size pkt., 15c.; pkt., 25c.; $\frac{1}{4}$ oz., 80c.; oz., \$2.75; $\frac{1}{4}$ lb., \$9.00.

Veitch's Autumn Giant—Heads are beautifully white, large, compact. Pkt., 10c.; $\frac{1}{4}$ oz., 25c.; oz., 50c.; $\frac{1}{4}$ lb., \$1.50; 1 lb., \$5.50.

Extra Early Dwarf Erfurt—Dwarf habit, compact growth; short outside leaves. Can be planted 20 inches apart. Pkt., 25c.; $\frac{1}{4}$ oz., \$1.00; $\frac{1}{2}$ oz., \$1.75; oz., \$3.25.

Large Late Algiers—Popular with canners and market gardeners. Ample foliage protects the heads well, which remain a long time fit for use. Pkt., 10c.; $\frac{1}{4}$ oz., 30c.; oz., 75c.; $\frac{1}{4}$ lb., \$2.00; 1 lb., \$7.75.

Collards

A plant of the Cabbage family. It is well adapted to the South, enduring extreme heat; excellent for greens. **True Southern, or Georgia**—Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.

Witloof Chickory (French Endive)

Sold by dealers in fancy fruits, during the winter and usually brings high prices. Imported in large quantities from Europe but equally as good can be grown here. Sow the seed in June in open ground in rows 12 to 14 inches apart, keeping free from weeds and watering if necessary. Take up the roots in November and cut off top to about 14 inches from the neck and shorten lower end to a uniform length of 8 or 10 inches. Prepare a trench 16 to 18 inches deep and place roots upright $1\frac{1}{2}$ inches apart. Fill in level with good, light soil and any portion may be forced by covering with 18 inches of manure. In 4 or 5 weeks the heads will be ready for use. The blanched head is the edible portion and is generally eaten raw as a salad.

Witloof may be grown indoors during the winter, furnishing a delightful salad when other fresh vegetables cannot be had. The ideal place is in the cellar, where a temperature of near 60 degrees can be maintained and where absolute darkness can be had. Provide a bed or box, as space permits, at least 18 inches deep and put in 4 inches of loose soil. Set the roots about 4 inches apart each way, piercing the soil about 3 inches. Fill in between the roots until crown is just covered, packing the soil lightly. This now leaves about 8 inches which can be filled in with more light soil, or better, clean, sharp sand. Keep the bed absolutely dark by covering with an old carpet or boards, and water as necessary, but do not keep soggy. Heads are ready for use as soon as they show above the sand, which should be in from two to three weeks. For indoor culture, the roots should be stored in a cool, dry place, covered with dry soil or sand. Pkt., 10c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.

Zanahorias

Carrots

Mohren

Sow in early Spring in drills 15 to 18 inches apart, finally thinning the plant to 3 or 4 inches. If sown early on a moist soil a half-inch is deep enough to cover the seed. The seed is slow to germinate. Keep clean by frequent hoeing and weeding. If neglected, the young plants are easily smothered, and the crop is lost. One ounce sows 100 feet of drill. Four ounces sow one acre.

Improved Danvers Half-Long

The best for general crop. Will yield the most per acre. Most profitable for market gardeners; stump rooted. It is grown largely everywhere on account of its productiveness and adaptability to all classes of soils. Tops medium size, roots deep orange, large but of medium length tapering uniformly to a blunt point. Smooth and handsome flesh; sweet, crisp and tender. Although of medium length, it is one of the largest yielders. We take extra pains in the selection of our seed stock. It is second to none. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Improved Long Orange

The standard late variety; very handsome and uniform in shape; roots are of deep orange color, good flavor; yields very heavily. Requires a deep soil. Plants should stand 6 inches apart in 18-inch drills for roots to attain their full size. The roots are smooth, fine grained and very large, growing to 12 inches in length and 3 inches in diameter. For feeding milch cows it is very valuable, as it increases the flow of milk and imparts to the butter a rich golden hue. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Earliest French Forcing

The earliest small round variety, much used for first early forcing in hot beds. Color reddish orange, and bunches very nicely; used largely for market, as well as kitchen garden. Quality the best. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Giant Pascal**Improved Chantenay**

A Popular and Profitable Sort to Raise for City Markets. It is about 6 inches long, thick through and decidedly stump-rooted. In size it is between the Oxheart and Danvers. The flesh is a deep orange red, fine-grained and of a splendid flavor. It is very early and always produces smooth, shapely roots. Its fine appearance finds for it a ready market; its splendid table qualities keep it in demand. Our strain of seed is unsurpassed. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Livingston's Early Market

A very choice strain. Tender, fine-grained flesh. An enormous producer; handsome, uniform stumped roots. Considered by many to be the best table Carrot, because of its quality and shape; free from core and of a deep golden yellow color. Can be sown very thick, and consequently well adapted for frame culture. A most excellent forcer. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Saint Valery, or Intermediate

A thick intermediate smooth variety; an English sort. It very much resembles the Danvers Carrot in both general shape and size. The color is a rich orange red, and of fine flavor. The roots grow very uniform; a most desirable Carrot for private gardens or market purposes. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Nantes Half-Long (Stump Rooted)—Sweet and fine flavored; almost without a core; very fine grained; excellent for the home garden or market. One of the finest in quality and handsomest in shape of the medium-sized sorts. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Early Scarlet Horn—For forcing and early garden use; flesh deep orange, fine grained; agreeable flavor; small top, stump rooted. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.40.

Oxheart, or Guerande—Intermediate length; is fully 3 to 5 inches in diameter, quality extra good. Some sorts require digging, but the Oxheart can be easily pulled. It is especially adapted to shallow soils, where the longer sorts would not thrive as well. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Carrots for Stock Feeding

Too much cannot be said in praise of the Carrot as a wholesome addition to the Winter feed for stock, apart from its great value as a vegetable for table use. The splendid roots make a most desirable change of feed for your cattle when given in connection with grain and dry fodder. Plenty of carrots for all purposes. Ask for prices in larger quantities.

Improved Short White—Very large, half-long roots; pearly white. It is the heaviest cropper known. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Large White Belgium—Standard for field culture. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Apio

Choice Celery Seed

Sellerie

Celery Culture

Celery can be successfully grown with but little labor, in any good garden soil, by using plenty of well rotted manure with a liberal sprinkling of coarse salt worked into it, and this mixture should be put in the trenches, working it well into the soil, at least two weeks before the plants are transplanted into them. It delights, however, in low, moist, rich bottom land, or well-drained muck soil. It is usually grown as a second crop. Sow the seed in a hot-bed or cold frame, or in the open ground, as soon as fit to work in the spring. Prepare the soil well and cover seed very shallow, firming the soil well after sowing, also keep quite moist until the seed germinates. To insure stalky plants, cut back to within two inches of the crown, when 4 inches high. Transplanting of the early sorts should be done about June 15th and from that on to Aug. 15 for the late varieties. Set plants in a single row, six inches apart, either on the level surface or in a shallow trench, giving them a good watering. The rows should be 3 feet apart where boards are to be used for blanching or four feet where soil is used. One ounce of seed produces about 2000 plants. Plenty of seed should be used so that the best plants may be selected for transplanting.

Giant Pascal

Forms solid, crisp stalks of incomparable flavor. Of strong growth, producing perfectly blanched stalks when hilled up properly. Of rich, nutty flavor. Blanches very easily and is very brittle. A fine keeper, an excellent shipper, retaining color and fresh appearance a long time. A favorite with Southern growers. For mid-Winter use, it is excellent. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Celery (Continued)

Golden Self-Blanching

This grand Celery is of French origin. It has the demand above all other sorts because of its many superb qualities. It has the same self-blanching habit as White Plume, but is much heavier and more compact, though not so early. Grows to good size, is very tender and free from strings, the heart large and solid, crisp, brittle, of excellent quality and very beautiful.

American Grown Seed from French Stock Seed—This has proven after repeated trials to be equal to French grown stock. Pkt., 10c.; $\frac{1}{2}$ oz., 35c.; oz., 65c.; $\frac{1}{4}$ lb., \$2.00; lb., \$7.50.

French Grown Seed—From one of our most careful growers. Pkt., 25c.; $\frac{1}{4}$ oz., 50c.; $\frac{1}{2}$ oz., 85c.; oz., \$1.50; $\frac{1}{4}$ lb., \$5.00; lb., \$18.00.

Livingston's Snowwhite

It is without a rival in purity of color; crisp, tender and of good size. In vigor of growth, ease of blanching, richness of flavor and beauty of stalk, "Snowwhite" is ideal. Single stalks sometimes weigh $2\frac{1}{2}$ pounds and quite frequently 2 pounds. It grows solid on all kinds of soil and keeps better than a great many of the best standard varieties. We are pleased to announce that we have a good supply of this most excellent sort this season. See illustration in specialty pages. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 45c.; $\frac{1}{4}$ lb., \$1.35; lb., \$4.50.

White Plume

Stalks and portions of the inner leaves and heart are so nearly white naturally that tying or simply drawing the soil up against the plants will complete the work of blanching. It is very ornamental. Early, of good flavor and fine texture; adapted to Fall and early Winter use; a good keeper up to the holiday season. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

New Columbia

For full description see specialty pages. Pkt., 10c.; $\frac{1}{2}$ oz., 20c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Easy Blanching

A new variety remarkably easy to blanch which together with its being adapted to early use as well as storing for winter make it especially suitable for the home garden. Stalks thick, brittle and excellent flavor; plant strong, healthy grower. Recommended especially to those who have not been successful with other sorts. Pkt., 10c.; $\frac{1}{2}$ oz., 30c.; oz., 50c.

Golden Self-Blanching

Winter Queen

Winter Queen

Of short, stocky growth, with broad, heavy stalks. An excellent variety for Winter use. When blanched, the stalks are of a creamy-white color and very attractive. Its flavor, crispness and long-keeping qualities combine to make this sort one of the best Winter varieties. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Boston Market—An excellent keeper; remarkably tender, crisp, solid. Best for light soils. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Evan's Triumph—A splendid long keeper of extra fine flavor. Healthy strong grower, crisp and tender. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Dwarf Golden Heart—Solid; an excellent keeper and of fine, nutty flavor. Heart, which is large and full is a light yellow. A showy and desirable variety for market. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Giant Golden Heart—In quality, appearance and large size, it is one of the best varieties for market gardeners. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Celeriac

Turnip-Rooted Celery

Sow seed the same way as for Celery. Transplant into rows 2 feet apart and 9 inches in the row. Thorough cultivation is necessary to secure good roots. Earthing up is not necessary. The roots may be cooked or used as salad.

Giant Smooth Prague—A large and smooth variety. Desirable for market; an excellent keeper; select stock. Pkt., 10c.; $\frac{1}{2}$ oz., 30c.; oz., 50c.; $\frac{1}{4}$ lb., \$1.50.

C. Brown, Greenup Co., Ky., writes: "My celery was the finest and best that ever was sold in our market."

Mrs. C. S. Williams, Washington County, Tennessee, writes: "I received the package of seeds today. Am obliged for your promptness."

Mrs. A. G. Wisdom, Urbana County, Missouri, writes: "This is our first seed order. My parents have been patrons of The Livingston Seed Company for thirty years."

Maiz dulce **Corn, Sweet or Sugar** Speise Mais

The Sweet or Sugar Corn Varieties, being liable to rot in cold or wet ground, should not be planted until May or when the soil has become warm and dry. For a full supply for the table during the entire season, plant every ten days or two weeks until the last week in July, in hills 2x3 feet apart for the early kinds, and 3x3 feet for the large late sorts. Some plant in rows 3½ feet apart and 8 inches apart in the rows. Give frequent and thorough cultivation all the season. Fully two weeks can be gained by starting Sweet Corn in pots or berry baskets, placing them in a hot bed or cold frame. They should not be started too early; three weeks before it is safe to plant in the field, is plenty soon enough. Plants should be well hardened off before they are removed from the hot-bed. In order to insure a good stand, put six seeds in each pot or basket, and later after transplanting to the garden, thin out to three or four plants to the hill. Water well ten or twelve hours before transplanting and if handled carefully, the plants will not wilt or be seriously checked in growth. For a succession, plant seed in the open at the same time plants are put out. **Two pounds of seed corn plants 200 to 300 hills; 15 to 18 pounds will sow an acre.**

SWEET CORN PRICES in quantities up to and including 2 pounds include prepayment of postage. If the larger quantities are wanted sent by mail, it will be necessary to remit additional amount at the Parcel Post rates. Refer to page 3 for rates.

Livingston's Early Sugar

A distinct and valuable addition to the early Sweet Corns. For full description see Specialty Pages. Pkt., 10c.; ½ lb., 20c.; 1 lb., 35c.; 2 lbs., 60c. By express not paid, ½ pk. (6 lbs.), \$1.20; pk., \$2.00; bu., \$7.50.

Livingston's Earliest on Earth

The earliest of the golden or yellow sorts. For full description see Specialty Pages. Pkt., 10c.; ½ lb., 25c.; 1 lb., 45c.; 2 lbs., 80c. By express not paid, ½ pk. (6 lbs.), \$1.75; pk., \$3.25.

Golden Bantam

Extra early, hardy and **always good**. For full description see Specialty Pages. Pkt., 10c.; ½ lb., 25c.; 1 lb., 40c.; 2 lbs., 70c. By express, not paid, ½ pk. (6 lbs.), \$1.50; pk., \$2.75; bu., \$10.00.

Golden Cream

A golden Country Gentleman. For full description see Specialty Pages. Pkt., 10c.; ½ lb., 25c.; 1 lb., 45c.; 2 lbs., 80c. By express, not paid, ½ pk. (6 lbs.), \$1.75; pk., \$3.25.

Bantam Evergreen

Golden Bantam cross with Stowell's Evergreen. For full description see Specialty Pages. Pkt., 10c.; ½ lb., 25c.; 1 lb., 45c.; 2 lbs., 80c. By express, not paid, ½ pk. (6 lbs.), \$1.75; pk., \$3.25.

Livingston's Evergreen (Red Cob)

Our old original variety, introduced by us in 1860, and now a general favorite for family use, as well as market purposes. It is a first-class second-early sort. Productive, large, well-filled ears, with broad kernels and small cob, filled well over tip. Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 2 lbs., 50c. By express, not paid, ½ pk. (6 lbs.), \$1.00; pk., \$1.65; bu., \$6.00.

Livingston's Evergreen (White Cob)

This is our old Livingston's Evergreen (described above), with a white cob. Pkt., 10c.; ½ lb., 30c.; 1 lb., 30c.; 2 lbs., 55c. By express, not paid, ½ pk. (6 lbs.), \$1.00; pk., \$1.75; bu., \$6.50.

Livingston's Broad-Grained

Very Broad and Sweet

For a number of years this variety has been closely selected to produce the broadest possible grains, and at the same time to retain its depth of grain and splendid quality. The grains are simply enormous when in the roasting ear before eating, Livingston's Broad-Grained Sweet Corn is unexcelled; there is no dodging of the knife about these big grains. The ears are of eight-rowed type and 7 or 8 inches long. It matures very soon after the Extra-Early varieties. Pkt., 10c.; ½ lb., 20c.; 1 lb., 30c.; 2 lbs., 55c. By express, not paid, ½ pk. (6 lbs.), \$1.00; pk., \$1.65; bu., \$6.00.

Narrow-Grained Evergreen

A selection of Stowell's Evergreen retaining its large size and productiveness and adding the delicious sweetness of Country Gentleman. There will be less trouble for the Cannery to get the farmer to grow Narrow Grained Evergreen on account of increased yield. The market gardener should find ready sale for this large, medium late sort. We believe our stock of it will be found superior to much that is offered. We intend growing it on our own farms, making very careful selections of planting stocks each season. Get started raising some of this variety this season. You will be pleased. Pkt., 10c.; ½ lb., 20c.; 1 lb., 35c.; 2 lbs., 60c. By express, not paid, ½ pk. (6 lbs.), \$1.20; pk., \$2.00; bu., \$7.50.

Narrow Grained Evergreen

Livingston's Evergreen

Country Gentleman**Columbus Market**

Ready for table with the second earlies, such as Crosby's Early, Shaker's Early, etc., but is fully twice as large as any of them. The ears carry an average of 16 rows of fine large, deep, white and very sweet grains, which are second to none in tenderness and flavor. The stalk is very strong, sturdy and of only medium height; the leaves broad and dark green in color, a habit of growth which gives it great endurance during a dry time. Especially adapted for early trucking; also **very desirable for the home garden.** Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 30c.; 2 lbs., 55c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.00; pk., \$1.65; bu., \$6.00.

Country Gentleman

One of the Richest Flavored of all the late varieties. As a table Corn this variety stands unrivaled, and without doubt is the most luscious of all varieties of Sweet Corn. The plump, pearly-white kernels are of great depth, and most delicious, and the flavor will delight an epicure. We have selected this sort for many years and are especially proud of our strain. It comes as true to type as any we have ever seen. Ears average 9 inches long by 2 inches in diameter and are typical "shoe-peg" appearance. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 35c.; 2 lbs., 60c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.20; pk., \$2.00; bu., \$7.50.

Kendel's Early Giant

The ears are large, measuring 8 to 9 inches long, thick through; with ten or more rows of plump and purest white kernels, that are of most deliciously sweet flavor. It is several days earlier than Shaker's Early, which gives it the distinction of being an early and at the same time a large-eared variety. Gardeners report this Sweet Corn ready to use in sixty days when grown on sandy soil, and in seventy-two days on heavy ground. Owing to our skillful selection year after year, Kendal's Early Giant has become a much more valuable sort than when first introduced. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 35c.; 2 lbs., 65c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.25; pk., \$2.15; bu., \$8.00.

Peep-O'-Day

The stalks of Peep-o'-Day Corn grow from $3\frac{1}{2}$ to $4\frac{1}{2}$ feet high and bear from 2 to 3 ears each. The foliage is light green and being small, stalks will stand very close planting. Have the rows just far enough apart to admit of thorough cultivation. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 35c.; 2 lbs., 65c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.30; pk., \$2.25.

Extra-Early Premo

A "sixty-day" Sweet Corn that combines all the merits of the leading varieties, and is superior to many of them in size, quality and yield. Premo can be planted fully as early as the Adams, for the young plants withstand slight frosts, while the other varieties are tender. The stalks grow about 5 feet high, and are very vigorous, generally bearing two well-developed ears to the stalk. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 35c.; 2 lbs., 65c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.30; pk., \$2.25.

Mammoth Late Sugar

Produces larger ears than any other Sugar Corn, and of good quality; a rich and very sweet late variety. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 35c.; 2 lbs., 60c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.20; pk., \$2.00; bu., \$7.50.

Extra-Early Adams

Same size, type and style as next below. Hardest and earliest Corn. It is not a Sugar Corn, but is grown for early use. Ears Short; kernels very white. Pkt., 10c.; $\frac{1}{2}$ lb., 15c.; lb., 25c.; 2 lbs., 40c. By express, not paid, $\frac{1}{2}$ pk. (7 lbs.), 60c.; pk., \$1.10; bu., \$4.00.

Early Adams

Similar to Extra-Early Adams; ear somewhat larger, but not quite so early; is good for early table use. Like the above, is hardy, and can be planted early. Pkt., 10c.; $\frac{1}{2}$ lb., 15c.; lb., 25c.; 2 lbs., 40c. By express, not paid, $\frac{1}{2}$ pk. (7 lbs.), 60c.; pk., \$1.10; bu., \$4.00.

Stowell's Evergreen

A favorite with canners and market gardeners for late use, and especially for the kitchen garden. Ears large, kernels, very deep, tender and of most delicious sweetness; very productive. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 35c.; 2 lbs., 60c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.10; pk., \$1.90; bu., \$7.00.

CORN CONTINUED ON PAGE 26

Columbus Market

WHITE EVERGREEN

Sweet Corn (Continued)

White Evergreen

This is a high-bred, pure-white type of the ever-popular **Stowell's Evergreen**. From one pure white-grained ear, accidentally discovered some years ago, it has developed by careful selection. Stalks very vigorous, 6 to 7 feet high. The ears are uniformly very large and well filled. When in the green state both cob and kernel are white as snow. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 35c.; 2 lbs., 60c.. By express, not paid, $\frac{1}{2}$ pk., (6 lbs.), \$1.10; pk., \$1.90; bu., \$7.00.

Black Mexican

One of the sweetest varieties, color when in roasting ear, purple and white; also a fine late sort. Pkt., 10c.; $\frac{1}{2}$ lb., 25c.; lb., 40c.; 2 lbs., 70c. By express, not paid, $\frac{1}{2}$ pk., (6 lbs.), \$1.40; pk., \$2.50.

Shaker's Early—This fine Corn is a splendid market variety, being large and well formed. It comes in a little later than the "first earlies," being a good variety to plant for mid-season. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 35c.; 2 lbs., 65c. By express, not paid, $\frac{1}{2}$ pk. (6 lbs.), \$1.30; pk., \$2.25.

Early Minnesota—White cob and kernels. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 35c.; 2 lbs., 60c. By express, not paid, $\frac{1}{2}$ pk., (6 lbs.), \$1.10; pk., \$1.90; bu., \$7.00.

Mammoth White Cory—This new strain is as early as the original Extra-Early Cory, with ears of larger size, and kernels more compact. Cob and kernel are pure white. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 30c.; 2 lbs., 50c. By express, not paid, $\frac{1}{2}$ pk., (6 lbs.), 85c.; pk., \$1.50; bu., \$5.50.

Extra Early Cory—Red Cob—One of the earliest varieties. Large ears, considering size of stalk; small red cob, well filled up with handsome and very sweet kernels. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 35c.; 2 lbs., 60c. By express, not paid, $\frac{1}{2}$ pk., (6 lbs.), \$1.15; pk., \$2.00.

Extra-Early Cory—White Cob—Identical with Extra-Early Cory, except color; the cobs are white. Pkt., 10c.; $\frac{1}{2}$ lb., 20c.; lb., 30c.; 2 lbs., 50c. By express, not paid, $\frac{1}{2}$ pk., (6 lbs.), 85c.; pk., \$1.50; bu., \$5.50.

"4 Best" Sweet Corns for Home Gardens

This collection will supply the table continuously throughout the entire season: **Mammoth White Cory** (extra early), **Columbus Market** (early), **Country Gentleman** (main crop), **New White Evergreen** (late). One large pkt., each of above, 30c.; $\frac{1}{2}$ lb., 70c.; 1 lb., of each, \$1.00, post-paid.

Sweet Corn for Fodder

Sow thickly in drills or broadcast at the rate of 2 to 3 bushels per acre. Express, not paid, pk., \$1.10; bu., \$4.00.

Livingston's Select Cucumber Seed

Livingston's Select Extra-Early White Spine

How to Grow Cucumbers

As soon as the weather has become settled and warm, plant in hills 4 to 6 feet apart each way, with 8 to 10 seeds in a hill; cover one-half an inch deep, smoothing the hill off with the hoe. When the plants are out of danger of insects, thin out to three or four plants to a hill. The seed may also be sown in rows 6 feet apart, with the seed every few inches in the row. When danger from bugs is past, they must be thinned out to 3 or 4 feet apart. This latter way of planting insures a good "stand," as the bugs cannot take all of them. Four or five moth balls placed in a dish or pan and set close to the hill, are said to drive away bugs. For pickles, plant from 1st of June to 1st of August. The fruit should be gathered when large enough for pickling, whether required for use or not, as, if left to ripen on the vines, it destroys their productiveness. Cucumbers forced under glass turn yellow quickly; sometimes from over-feeding, and often from the use of manures that are quick acting; on this account cow manure is preferred to horse manure. **One ounce of seed will plant about 50 hills; one to two pounds to the acre.**

Livingston's Selected Davis Perfect

By using this variety gardeners can produce out-of-door Cucumbers that will sell in the market for hothouse forcing varieties. The shape is ideal. It is almost seedless one-third of its length from the stem, and the few seeds that are contained in its blossom end when in eating condition are so small and tender that they are hardly noticeable. Most important of all, it does not lose its dark, rich color when grown outdoors. It is hard to tell the difference between it and a hothouse cucumber. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Extra-Long, or Evergreen White Spine—Averages longer than other strains. Extra fine shape and quality; makes a good pickle; used extensively for growing under glass. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Arlington Improved White Spine—For market use and pickling it is superior to the old White Spine. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Livingston's Select Extra-Early White Spine

This private strain we have had over thirty years, and it is the most thoroughbred, uniform and shapely variety known, not only for first early, but for general crop as well.

Excels in earliness, often ready for slicing when other sorts are only pickles. In purity it is unequalled. Vines are vigorous growers. The very best for slicing, and make choice pickles, straight and smooth; a great bearer; keeps green much longer than the yellow varieties; no sort excels it in crispness and flavor. Every market gardener knows how difficult it is to secure pure cucumber seed, and as this sort is remarkably free from mixture we are sure it will be quickly appreciated. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Livingston's Evergreen Pickling

(Introduced by us in 1890.) Generally admitted to possess every qualification required in a perfect pickling Cucumber. Exceptionally productive. One grower says it bears "four to one," compared with many standard sorts. It is a very strong grower, extra-early and bears firm, crisp fruits, which are excellent for slicing also. **We devote the greatest care to the selection of this seed stock.** Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Early Fortune

A fine new variety of White Spine type; the fruit is of uniform size and shape and is of very firm texture, thus permitting long distance shipping. The skin, which is dark green, holds its color remarkably well, and therefore remains in slicing condition longer than some of the other standard sorts. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Cumberland—Is of the hardy, White Spine type. The pickles differ from all other hardy sorts in being thickly set with fine spines over almost the entire surface. During the whole period of growth the form is very straight and symmetrical, thus being a choice for slicing as for pickles. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Livingston's Selected Davis Perfect Cucumber

Improved Long Green

Improved Long Green

(See illustration above.) The vines are very strong growing and productive. The fruits are quite long, averaging 10 to 12 inches in length. This sort is very popular both as a slicer and for pickles. One of the best general purpose Cucumbers. **Extra choice stock grown on our own farms**—Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Klondike

Excellent strain of White Spine, remarkable for the uniformly dark green skin of its shapely fruits. Popular with Southern planters for shipping to the Northern markets. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Westerfield Chicago Pickling—Popular with Chicago gardeners. Medium length, slightly pointed at ends; very large; prominent spines; deep green. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Jersey Pickling—Intermediate between Long and Short Green. Long, slender, cylindrical; crisp and tender. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Green Prolific, or Boston Pickling—Of uniform growth, seldom too large for pickling; immensely productive. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.15.

Extra-Early Russian—Small, extra-early, hardy; productive, good for small pickles. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Curious Cucumbers

Serpent or Snake Cucumber—A great curiosity. Interesting for children or for exhibition. The Cucumbers grow curled up like a snake, with head protruding; sometimes several feet in length. Pkt., 10c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.

Gherkins (True West India)—Used only for pickles. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

"Lemon" Cucumber—A new and desirable variety, having a strong resemblance to a lemon in its size, shape and color. It has a thin skin. The crispness, tenderness and sweetness are all that could be desired and it seems to lack the bitterness of the common Cucumber. Pick just as it turns yellow. Pkt., 10c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.

Japanese Climbing—Vines extra strong; being a climbing sort, can be grown on trellises or other supports; valuable in small gardens. Very prolific, from 40 to 50 fruits having been counted on single plants. The Cucumbers are long and of fine flavor. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.; lb., \$1.25.

Livingston's Emerald

(Introduced by us in 1897)—We were eight years in perfecting this variety, which represents a **dark-green Cucumber that will hold its color. It is strictly an evergreen**, retaining its color until quite ripe, making it very attractive. The plant sets early, and its vigorous vines abound in long, straight, handsome fruits of the most desirable qualities. **As a slicer the flesh is perfectly crisp and tender and the flavor most pleasing.** The young fruit is dark green, straight, slender and almost spineless; makes an excellent pickle, and when ripe none excel it for making sweet pickles. It is not excelled for beauty in color and form. Excellent shipping variety. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Early Frame, or Short Green—A popular early variety of medium size and good shape; good for small pickles. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Nichol's Medium Green—Introduced by us in 1883. Color dark green; flesh crisp and tender; medium size; straight and smooth; a real handsome and prolific variety. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Early Green Cluster—Short and prickly; bearing in clusters; prolific; fine for bottling. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Cool and Crisp—The beautiful green color is all that can be desired. Excellent for pickling or slicing. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Rawson's Hothouse—A very fine strain of Cucumbers for forcing in greenhouses. Fruit is about two inches longer and darker green in color than White Spine. Pkt., 10c.; $\frac{1}{2}$ oz., 35c.; oz., 65c.; $\frac{1}{4}$ lb., \$2.00; lb., \$7.50.

The "Vickery" Forcing—Rich, dark green in color, immense cropper. A choice variety for hothouse growers; also hard to excel for out-door cultivation. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 45c.; $\frac{1}{4}$ lb., \$1.40; lb., \$5.00.

Rollison's Telegraph—Grows about 18 inches long; bright green, and is almost seedless. Pkt. of 15 seeds, 25c.

Dandelion

Sow in May or June, in warm, rich soil, in drills half an inch deep and 18 inches apart. Some of the plants will be ready for use in September, balance the following Spring. Make delicious greens. **One ounce will sow 150 feet of drill.**

Large-Leaved—Leaves fully double the size of the common Dandelion. Years of the most careful cultivation have developed a very fine strain of seed. Pkt., 10c.; $\frac{1}{2}$ oz., 30c.; oz., 50c.

Klondike

Livingston's Mammoth Purple Egg Plant

Berënjena Egg - Plant Eierpflanze

Sow seeds in hotbed or warm greenhouse in March or early April; if no hotbed is at hand, they may be grown in any light room where the temperature will average 75 degrees. When plants are two inches high, or have formed two rough leaves, transplant them into beds and set 3 or 4 inches apart. Keep beds closed and very warm, shading from direct rays of the sun and giving an abundance of water until the ground is warm and all danger from frost and cold nights is past; then harden the plants by gradual exposure to the sun and air, and increase the supply of water. richness of the ground. When about a foot high, draw the earth up to the stems. Care should be used in cutting the Transplant to the open ground late in May or June, into warm, rich soil, 2 to 3 feet apart each way, according to the fruit so as not to disturb the roots of the plants. **One ounce of seed produces about 1000 plants.**

Livingston's Mammoth Purple

(See illustration above of typical fruits grown on "True Blue" trial grounds.)

This splendid variety we have obtained by years of the most careful selection and extra cultivation, beginning with a true strain of New York Improved Large Purple. We now have the finest strain of Mammoth Purple Egg Plant obtainable. It is quite early for such a large sort, a sure cropper, and entirely spineless. The plants are large, vigorous and very productive. The fruit is uniform in color and shape, very large, usually 6 to 8 inches in diameter, but sometimes specimens are grown measuring 10 inches. Skin a handsome dark purple, smooth and glossy. Flesh white, of superior quality. **Selected Seed**—Pkt., 10c.; $\frac{1}{2}$ oz., 15c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Black Beauty

From ten days to two weeks earlier than the purple varieties, and of rich, lustrous, purplish black color and is a distinct sort and a favorite where known. The plants are remarkably healthy in their growth and yield an abundance of large fruits. The fruit is very attractive in appearance. This variety is entirely spineless. Quality the very best. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 45c.; $\frac{1}{4}$ lb., \$1.35; lb., \$4.50.

New York Improved Large Purple

A leading variety; fruit very large, oval shaped, smooth, deep purple; flesh white and of good quality. The seed we offer is a very fine strain of this popular sort. Pkt., 10c.; $\frac{1}{2}$ oz., 15c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.25.

Florida High Bush

A large fruited purple sort; very popular with Southern growers. Fruit is held well up off the ground. A splendid shipper and finds ready sale. The plant is vigorous, quite productive, drought resisting and stands wet weather well. Pkt., 10c.; $\frac{1}{2}$ oz., 15c.; oz., 30c.; $\frac{1}{4}$ lb., 90c.; lb., \$3.25.

Mrs. Henry Johnson, Tuscarawas County, writes as follows: "I have planted Livingston's True Blue Garden Seed for over thirty-five years, and never found one packet that was not all right."

Mrs. Stuart Anderson, of Colorado, writes as follows: "I used Livingston's Seeds in Ohio with beautiful results, I used them in Montana with equally good results, so I expect nothing but the best from Livingston's Seeds planted in Colorado. I am loaning my catalogue to a neighbor to whom I have praised Livingston's Seeds."

Florida High Bush

Dwarf Green Kale
Growing in Our Trial Grounds

Herbs

Sweet, Pot, Culinary, and Medicinal

Herbs delight in a rich, mellow soil. Sow in early Spring in shallow drills 1 foot apart; cover lightly with fine soil, and when up a few inches thin out, or transplant into prepared beds. Care should be taken to harvest properly. Do this on a dry day, just before they come into full blossom; dry quickly in the shade, pack closely in bottles or dry boxes to exclude the air. Varieties in the list marked with an (*) are perennials.

	Pkt.	Oz.		Pkt.	Oz.
Anise	5c	10c	*Rosemary	5c	35c
*Balm	5c	20c	*Rue	5c	15c
*Caraway	5c	10c	Saffron	5c	15c
*Catnip, or Catmint	5c	30c	Summer Savory	5c	20c
Coriander	5c	10c	Sweet Basil	5c	15c
*Fennel, Sweet	5c	10c	Sweet Marjoram	5c	20c
*Horehound	5c	20c	*Thyme	5c	35c
*Lavender, Sweet	5c	20c	*Wormwood	5c	25c
*Peppermint	10c				

Dill—This herb is used in large quantities in the making of Dill Pickles; also for flavoring vinegar. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Sage—Sow in rich ground and thin out the plants to stand 15 inches apart. Used for flavorings and dressings. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Endivien Salat Endive Endibia o Escarola

For an early crop, sow in April in drills 15 inches apart, and later thin the plants to stand 12 inches apart in the row. The main showings are made in June and July. When nearly full grown, gather up the leaves and tie them by their tips to blanch them. One ounce of seed will sow 150 feet of drill.

Large Curled Pancalier—Erect grower, early, large, very finely curled, productive and with rose colored ribs. Center so dense that it blanches itself. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 70c.; lb., \$2.25.

Fine Green Curled—Hardest variety; the most desirable for home use or market garden. Deep green leaves, beautifully cut and curled; easily blanched. (See illustration.) Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Large Green Curled—A hardy, vigorous growing variety with bright deep green leaves. The dense mass of deeply divided leaves formed in the center blanches very readily to rich creamy white. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Broad Leaved Batavian—Broad, thick and slightly wrinkled leaves; form very large heads, which are much used in soups. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., 2.00.

Garlic Sets

Garlic Sets or Bulbs are planted in early Spring in rows 12 inches apart, placing the sets 4 inches apart in the rows, 2 inches deep, or in the same manner as Multiplier Onions. Garlic is used for Flavoring purposes. Bulbs, postpaid, oz., 5c.; $\frac{1}{4}$ lb., 15c.

For GOURDS see Flower Seed Pages.

Kale, or Borecole

Breton

Blatterkohl

Kale, or German Greens, do not form heads, but furnish an abundance of pretty curled leaves that are highly prized as food. Sow from the middle of April to the beginning of May; transplant and cultivate like Cabbage. Will endure considerable frost without injury. One ounce of seed sows 200 feet of drill. 4 pounds sow an acre.

Dwarf Green Curled, German Greens, or Sprouts. (See illustration)
—Is very dwarf and spreading. The leaves are beautifully curled and of a bright green color. Quite hardy. Pkt., 5c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

Siberian Kale—Dwarf growth, bluish green leaves. Sow in September in rows a foot apart, and cultivate the same as Spinach; very hardy and makes an excellent Spring green. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Kohl Rabi, (Turnip-Rooted Cabbage)

Col rabano o Nabicol

Kohlrabi

When young and tender they are fine for table use; when matured, they keep splendidly and are excellent for feeding stock. For early use, sow in hotbed, transplant and cultivate like Early Cabbage. For Winter use, plant the middle of June or first of July outdoors in rows 18 inches apart, transplanting or thinning out to 8 inches apart in the rows. One ounce of seed sows 200 feet of drill.

Earliest White Vienna—Greenish white outside, with clear white flesh within. Smooth, short leaf; good for forcing; fine in quality. Pkt., 5c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

Earliest Purple Vienna—Same in every respect as the Earliest White Vienna, except in the outside color. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 75c.

Puerro Leeks Porree oder Lauch

Broad Scotch, or London Flag—A hardy kind; large, strong plants with broad leaves. Cultivation the same as for Onions. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.50.

Large Musselburgh (Carentan or Scotch Champion)—Favorite market sort of enormous size; large broad leaves; flavor is very mild. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.50.

Endive—Fine Green Curled

Livingston's Superior Lettuce Seed

Grand Rapids

Culture—For early Spring use, sow in a seed bed in September or October, and protect through the Winter in cold-frames, or in the South with leaves or litter; or sow in a hot-bed in early Spring. Lettuce plants may also be started very successfully in the house in boxes which are about 5 inches deep. Make soil very fine and firm. Mark off into rows 2 inches apart and $\frac{1}{4}$ inch deep, into which sow the seed quite thinly; cover with blotting or brown paper fitted into the top of the box. First saturate the paper with water and keep moist until the seed germinates; then remove.

Expose the young plants gradually to the light. As soon as the ground outside is dry and warm so that it can be well worked, set out the plants 8 inches apart in the rows. For a later supply, sow seeds in the garden every two weeks from the middle of April until July, choosing varieties according to their heat-resisting qualities. Sow very thinly in rows 18 inches apart, covering seed $\frac{1}{4}$ inch deep with fine soil, and when well up thin to 12 inches apart in the rows. In order to have crisp, tender Lettuce, it should be grown as rapidly as possible, therefore the soil should be made very rich by liberal manuring. It is also necessary to keep the soil thoroughly cultivated. Poor soil and lack of cultivation invariably causes poor quality Lettuce. One ounce of seed sows 100 square feet; plants 120 feet of row; produces 3,000 plants.

Selected Grand Rapids Lettuce

Especially Adapted for Greenhouse Culture in Winter; Also a Good Lettuce to Sow Outside Early in the Spring.

Our Stock of This Variety is Extra Fine and is Greenhouse as Well as Out-door Tested for Purity.

Grand Rapids does not form a head, but makes large, compact bunches of light, attractively curled and fringed leaves. It grows very rapidly and keeps in good market condition for a long time after cutting. The seed should be sown more shallow than other sorts, otherwise it may not germinate. Our strain of Grand Rapids is extra fine, and besides we grow it in greenhouse to test for purity before sending out. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50; 5 lbs., \$7.00; 10 lbs., \$13.50.

Livingston's Crisp-as-Ice

(Introduced by us in 1895.) A most beautiful, attractive Lettuce of the cabbage type. The heads are solid, of immense size when well grown, and so exceedingly crisp, tender and brittle as to fully warrant the name, **Livingston's Crisp-as-Ice**. The glossy leaves are thick, nicely crimped and curled; the outside leaves are beautifully variegated with dark brown bronze and green. The heads when cut open, have a rich, creamy yellow heart. A superior family and home-market Lettuce and so hardy as to withstand frost very late in the season. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

E. C. Lonnesberg, Wayne Co., Mich., writes, Nov. 12: "You will be interested to know that I am using Livingston's Crisp-as-Ice Lettuce now from my open garden, when all other varieties are frozen and gone."

From R. E. L. Tomlison, Falls Co., Tex., Feb. 7, 1917: "I have used your seed for a number of years with first-class results. In my opinion for class of seed and treatment of customers, you stand in a class alone."

Early Curled Simpson

A leading early sort; does not head, but forms a compact mass of curly leaves of yellowish green. Matures early; generally grown as an early crop. Very tender and crisp. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Livingston's Crisp-as-Ice

Selected Big Boston

(White Seeded)

A very desirable large variety for forcing in cold-frames and for outdoor planting. Plants large, hardy, vigorous. Leaves broad, smooth, thin, of a light green color. One of the most popular sorts in the South for shipment to Northern markets. It forms good-sized heads and does particularly well during the cool Fall and Spring months. Heads of a pleasing light-green color, firm and of superior quality. When grown in cold-frames, the heads are not as tight as when grown outside. One of the best market varieties we know. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Unrivalled

A Green Big Boston

A selection from Big Boston. Heads large, uniform and of a bright green color with no red tinge. For full description see specialty pages. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

The Preferred

A Black-Seeded Big Boston

A new variety quite similar to Big Boston except as to color of the seed, which in this variety is black, hence more hardy. The heads are large and compact; and the leaves have somewhat less of the slight bronze tinge on the outer edge of the leaves, which is common to the old style of Big Boston. If this has proven an objection, the preferred should be found more desirable. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

St. Louis Black Seeded Forcing

One of the best all round smooth leaved head lettuces for forcing in cold frames or for planting in the open. Hardy and vigorous grower, heads large, firm, compact and quality unsurpassed. Leaves broad, smooth and of a very desirable green color, medium. This variety is one of the surest to head under all conditions. Unlike many varieties it does not turn brown at approach of cool weather. Grown almost exclusively by the market gardeners of St. Louis. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.40.

Black Seeded Simpson

Black-Seeded Simpson

Is very popular among market gardeners, and fine for the home table. Forms a large, loose head. Its nearly white, curly leaves are large, thin, very tender and of good quality. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

May King

This remarkable variety has proven itself capable of satisfying the most exacting requirements that could be made on an early outdoor Lettuce. It is not easily affected by cold or wet weather, grows very quickly and produces, even in poor soil, splendid globular heads very early in the Spring. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

All Heart

This excellent variety of Lettuce is in favor of both private and market gardeners. It is a very reliable hard-heading variety of cabbage-lettuce and will give satisfaction wherever grown. It rarely fails to make a large, solid head and is adapted for both Spring and Summer use. It withstands heat and forms large heads, leaves closely set, with solid heart, even before it is half grown. Color yellowish-green; flavor rich and buttery. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Prize Head

Large heads; even the outer leaves are crisp and tender; light green, tinged with brownish red. Superb flavor; very hardy; very fine for home use; too tender to ship any great distance. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Deacon

This Lettuce does not grow as large as some sorts, but has few outside leaves; grows very solid and of delicious buttery flavor. Center of head blanches to bright yellow shade; very crisp and tender, remaining so for long time, even in hot weather. One of the finest Summer sorts. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

All-Heart Lettuce

California Cream Butter

Extra fine sort of this type, forming splendid, large, compact heads in cool weather. Heads round and solid; outside green; within the leaves are a rich creamy yellow color; most delicious and buttery in taste. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Denver Market

An early head-lettuce for forcing or open ground. Heads are large, solid and of a desirable light green. Leaves are beautifully marked and blistered; crisp, tender and delicious. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Mammoth Black-Seeded Butter

Heads large, solid, blanching to white at center; leaves smooth, thick, brittle, tender and extra fine flavored. Long standing. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Improved Salamander

Large, compact heads; color light green, shading to white at the center; leaves thick, smooth, tender and of fine quality. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Early White Cabbage, or Philadelphia Butter

This old reliable variety is very tender, has large, solid, greenish white heads and stands the heat extremely well. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Wonderful

(New York)

This splendid mammoth heading and long-keeping variety has been grown to weigh 6 lbs. to the head; frequently weighs 2 or 3 lbs. Heart is solid, of light green color, very sweet, tender and crisp. Long standing, perfect heads may be cut from the same bed for many weeks. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Improved Hanson Lettuce

Improved Hanson

None more reliable for outdoor cultivation. Heads grow to a remarkable size, resembling that of a flat cabbage. Extremely slow to run to seed. Outer leaves are bright green and beautifully frilled on the edges; inner leaves white and deliciously sweet, tender and crisp. In our trial grounds with dozens of other sorts, it withstood Summer heat among the best. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Iceberg

A beautiful Lettuce, with large, curly leaves of a bright, light green, with a very slight reddish tinge at the edges. Handsome heads, unusually solid because of the natural tendency of the large, strong leaves to turn in, which also causes thorough blanching. Crisp, tender and fine flavor. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Celery Lettuce

Trianon Cos.—This variety is the finest of the Cos or blanching sorts. The long, narrow leaves, which form solid heads, like Early Jersey Wakefield Cabbages, blanch and become snowy white. Excels in quality and crispness. The leaves, when blanched, are stiff like Celery, and can be eaten in the same manner. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Livingston's Lettuce Mixture

One Sowing Produces Salad for the Season

Contains a grand assortment of decidedly distinct and excellent Lettuces. They mature early, medium and late; some curled and crimped, others produce heads. Colors range from almost pure white, through delicate shades of green and yellow to rich golden. All are delightfully fresh, crisp, tender and of excellent flavor. All sizes, from the small early to the mammoth Summer varieties. Liberal pkt., 10c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.

Special Lettuce Collection 10c

One full-sized packet each of the following: Selected Btg Boston, best head Lettuce; Selected Grand Rapids, early curled Lettuce; Deacon, finest "butter head" Lettuce—for 10 cents.

Wonderful Lettuce

Musk Melons or Cantaloupes

Melon Almizcleno o Cantalu

Zucker Melonen

A rich, sandy soil and good seed are absolutely necessary for success in raising the best Musk Melons. The seed should not be planted until the ground has become dry and warm; plant in hills 6 feet apart each way; old, well-rotted manure should be thoroughly mixed with the soil in each hill and in liberal quantity. Put six to ten seeds in the hill, and when danger from insects is past, leave three or four of the strongest plants only. Musk or Cantaloupe Melons may be also sown in rows, that are made about 6 feet apart, and when the plants are well up thinned to stand in hills 5 to 6 feet apart, just before the plants begin to run. This method insures a good stand of plants in spite of the bugs. If the plants grow very rank, the tips of the leading shoots should be pinched off when about 3 feet long. Cultivate often and not deep. One ounce of seed will plant 60 hills; 2 to 3 pounds will sow an acre.

Green-Fleshed Sorts

Delicious Gold-Lined

(See illustration alongside.) It is a pleasure to be able to offer **Gold-Lined Rocky Ford**. Our stock of it is the result of several years careful selection by a progressive grower. The shape is ideal, being slightly oval, and it is heavily netted over the entire surface. The flesh of the entire Melon is noticeably thick, fine grained and sweet. The color is green with a gold margin next to the seed cavity. Attractive both as to outward appearance and when cut. Pkt., 10c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Livingston's Ohio Sugar

The Green-Fleshed Tip-Top—Every one who tries this Melon goes into ecstasies over its captivating flavor. It has that delightful rich aromatic flavor which is so refreshing. For full description of this grand variety, see specialty pages. Pkt., 10c.; oz., 20c.; ¼ lb., 65c.; lb., \$2.00.

Honey Dew

A Musk Melon of a new type. For full description see specialty pages. Pkt., 10c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Burpee's Netted Gem

This very early Cantaloupe melon is one of the most delicious in the whole list. Small and round in shape. Firm, green flesh. Sweet and luscious clear to the rind. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Livingston's Rose Gem

A fine green-fleshed shipping Musk Melon named and introduced by us in 1896. In shape it is more oval than the original strain, which gives it additional strength to stand long-distance shipping. One of the best and most profitable extra-early melons in existence for market gardeners and shippers, being especially adapted to basket-shipping. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Delicious
Gold-Lined

Rocky Ford

An improved Netted Gem Melon with sweet, green flesh. In the hands of the Rocky Ford (Colorado) growers it has made that state famous in Eastern Markets for melons of unequalled quality. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Texas Cannon Ball

The following statement is from one of the largest melon seed growers in this country: "This melon should be more universally grown as it has considerable merit. It is slightly larger than the Rocky Ford Cantaloupe, is perfectly round, heavily netted, with no ribs, and has the thickest flesh of any melon grown. Flesh is green in color and of good flavor. It has never been used as a shipping melon to any extent, yet the rind is tough and is a good keeper. It should become more popular as it becomes better known, and we believe it has quite a future." Our strain is an excellent one. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Extra Early Hackensack

Produces melons two weeks earlier than the well-known Hackensack; heavily netted, and has light green flesh of most delicious flavor; a splendid Cantaloupe melon. Its shape and solidly admit of its being packed very closely in crates for shipment, and it will keep in good condition for several days after picking. Large, fine form; grown also for the home garden very extensively. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.35.

Hackensack (Turk's Cap)—A General Crop Melon. It is round, well netted, and of large size; flesh green and thick; delicious flavor; beautiful in appearance. Very popular the country over. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Acme, or Baltimore Nutmeg

Has a beautiful, heavily netted, green skin; good size; shape is oval, slightly ribbed; flesh thick, green, very finely flavored, smooth. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 85c.

Long Island Beauty

A splendid variety, on the style of the Extra-Early Hackensack, but slightly more ribbed. It is of very superior quality, with green flesh. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Extra-Early Green Citron

The largest of the very early nutmeg melons. Form nearly round; fairly netted; flesh green; quality very fine. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Dwarf, or Bush

This Melon grows in bush form; the stem between the joints of the vine being shorter than on the ordinary kinds. Fruit small but early and very productive. The hills can be planted as close as 2½ feet apart, leaving 2 to 3 plants to the hill. Pkt., 10c.; ½ oz., 15c.; oz., 25c.

Livingston's
Rose Gem

Salmon-Fleshed Sorts

Livingston's Tip Top

TIP-TOP IN QUALITY—TIP-TOP IN APPEARANCE—TIP-TOP IN PRODUCTIVENESS—Introduced by Us in 1892—This splendid melon has "held it own" for many years against all introductions in the melon line, and no yellow-fleshed melon of which we have any knowledge compares with it in good qualities. The testimony of all who have used **Tip Top** is that every melon produced, whether big or little, early or late, is a good one—sweet, juicy, finest flavor, firm (but not hard) fleshed and eatable to the outside coating. Its appearance on the market is very attractive—sells on sight. Customers soon learn to pick them out and will have no other variety. Fruit of large size, and flesh attractive bright salmon in color; nearly round, evenly ribbed, moderately netted, very productive.

Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Rocky Ford Pink Meat

The Pink Meat Rocky Ford Cantaloupe has become very popular in the last two or three years. Is quite similar in appearance to an Eden Gem type of Rocky Ford, being beautifully netted, but the flesh is pink. Its shipping qualities are excellent, quality all that can be desired, and we believe is destined to be very popular. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Osage, or Miller's Cream

A favorite salmon-fleshed variety. Large, oval, slightly ribbed and netted; skin is very dark green. Flesh is very thick and sweet flavored, most delicious to the rind. The whole crop is very even and fruit extra heavy, owing to this thickness of the flesh. A great favorite for both market purposes and the home garden especially. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Hoodoo

The vine is quite vigorous, resisting blight better than most other sorts, and is very productive. The fruits vary slightly in shape, averaging nearly round, quite like the Netted Gem. The netting is distinctive in being exceptionally dense and fine, and it extends over practically the entire surface. The rind, although thin, is so very firm that the melons arrive in distant markets in perfect condition. Flesh very thick, highly colored, of finest texture and delicious flavor. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

The Davis Grand

"The Grand" is 10 to 14 days earlier than the Osage, under the same conditions. It is salmon-fleshed and is remarkably uniform in size; the color and flavor of flesh are very fine. It sets fruits near the roots, has a more vigorous vine and therefore resists disease better than most sorts. Fruits average about 6 inches in diameter. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Hoodoo Musk Melons—Grown in our Trial Grounds.

Burrell's
Gem

Burrell's Gem

(Ordway's, or Osage Gem)—A superior new orange-fleshed shipping melon. Of splendid flavor, sweet and aromatic; oblong in shape, smoothly rounded ends closely netted and slightly ribbed, dark green skin. The rind is thin, but tough; flesh exceptionally deep rich salmon-orange color. Fruits average 6 by 4 inches. Very fine for marketing. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Paul Rose (Petoskey)

A successful cross of the Osage with the Netted Gem, which combines the sweetness of the one with the fineness of the other. A large size Netted Gem with deep orange flesh. Early as the Netted Gem. Adapted to shipping in baskets. Originated with an extensive grower of Northern Michigan. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Emerald Gem

Ripens early; medium size; nearly round; flesh a delicate light salmon color, very thick, fine grained, and very few melons can compare with it in superb flavor. The rind is thin, dark green, ribbed, slightly netted. One of the best for home use. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Banana

Very odd; 18 to 21 inches long. Yellow flesh, blending from bright green to rich salmon. Fragrant, and one of the most delicious of melons. Early. Pkt., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Surprise

Fruit medium to large size, oval, distinctly ribbed, covered with slight patches of netting; skin light yellow. Flesh salmon color. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Perfection

(Princess)—Medium size. Dark green skin, heavily netted; flesh a rich orange color; very sweet. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

We can also offer **Early Green Nutmeg** and **Jenny Lind**. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Mr. Joshua Owens, Howard County, Maryland, writes: "I tried your Gold Lined Rocky Ford Muskmelons last year and they were the best that come to our market. Off of one thousand hills I sold \$200.00 worth."

Geo. C. Short, Adams Co., Ohio, writes: "I have been buying seeds of you regularly for about 20 years, and they have always given entire satisfaction."

Jos. Garrison, Columbia Co., Pa., writes: "I have always liked to deal with your firm, for I am sure to get not only seeds that are clean, pure, true to name, but of such excellent vitality that they could not help but grow."

Fred C. Holmes, Blair Co., Pa., writes: "I have the best garden in this neighborhood and I owe it all to the Livingston Seed Co., for they are hard to beat."

Water Melons

Sandias Wassermelonen

A light, sandy soil, with good exposure to the sun, is the best situation to plant Water Melons. The ground should be prepared deep, but receive shallow cultivation. Hoe often and very thoroughly. If extra-large Water Melons are desired, for exhibition purposes, leave but one or two on a single vine. Plant in hills 8 to 10 feet apart each way, with a very generous shovelful of well-rotted manure mixed with the soil in each hill. If commercial fertilizer is used, it should contain a large percentage of ammonia and potash. Plant eight or ten seeds in each hill, and finally, when danger from insects is past, thin out to three strong plants. Owing to the large size of Water-Melon seeds, the ounce size packets are about right for small gardens. One ounce of seed will plant 20 to 30 hills; four or five pounds will plant an acre.

Florida Favorite

A splendid oblong Melon; ten days earlier than Kolb's Gem. Skin dark green, slightly mottled with still deeper shade; flesh dark red and of the finest flavor and quality. We have a splendid stock of this Melon to offer, at an exceedingly low price. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Kleckley Sweets

A Great Melon for Home and Nearby Markets

This splendid Water Melon has certainly become very popular wherever it has been thoroughly tested. It is of superb, luscious flavor. While the skin is perhaps too thin to admit of the Melons being shipped very great distances to market, it is most desirable to plant for home use or local markets. The Melons themselves are very large, oblong in form, with dark green skin, thin rind, which is very brittle. Flesh is bright scarlet, with solid heart, deliciously crisp, sugary and splendid in every way. The Melons average from 18 to 20 inches in length by 10 to 12 inches in diameter; of handsome appearance; ripens early, and is most desirable for the home garden. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c. By express not paid, 5 lbs., \$3.25; 10 lbs., \$6.00.

Cole's Early

Very hardy; a sure cropper for Northern states. Delicate in texture of flesh, which is dark red; rind green, striped with lighter shades, thin and very brittle; of medium size, and nearly round; matures early; especially good for home use. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

New Chilian

A new white seeded Melon of fine quality, with a reputation already established in the Pacific states, and will, no doubt, become very popular elsewhere when it is better known. Fruits medium size, nearly round or slightly oblong, skin rich, deep green, indistinctly mottled and striped with a lighter shade. Flesh bright red, remarkably fine grained, firm and sweet, quality second to none. A good shipping Melon and keeps exceptionally well. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Harris' Earliest

One of the earliest good Water Melons. Large, oval sort, with mottled skin. Sweet, tender flesh. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Tom Watson

Tom Watson

An extra long Melon of attractive appearance, uniform in shape and quality. The luscious crimson flesh is "as sweet as honey," melting, and of superb flavor. The average Melon will weigh 35 to 40 pounds and measure about 28 inches long and about 12 inches in diameter. It is very prolific, producing in greatest abundance the large delicious fruits. (See illustration of specimen fruit.) We have great faith in the **Tom Watson** and believe it is one of the very best Water Melons ever offered. Introduced only a few years ago and has already taken a leading place with large melon growers and shippers. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c. By express, not paid, 5 lbs., \$3.00; 10 lbs., \$5.75; 100 lbs., \$55.00.

Halbert Honey

Halbert Honey

A very sweet, long, dark green variety. Fruits average 18 to 20 inches long, have a thin rind and deep red meat of delightfully delicious flavor; pulp entirely free from stringiness; seeds white. One of the finest for the home gardener. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Taylor Wilson, Wicomico Co., Md., writes: "The **Tom Watson** Water Melon seed I got from you was the truest I ever saw. There was not a mixed one in the patch I had the best patch of Water Melons that was around here. Everybody who saw them said they were the best they ever saw in their life and the truest **Tom Watson**. People asked me where I got my seed and I told them from you people. I will buy from you as long as you treat me right and will do all I can for you."

Sweetheart

A Great Producer—Splendid for Shipping—Very Popular in the South

Another variety of Watermelon, which should not be set aside on account of the many new varieties recently introduced, for it is hard to beat as to quality and productiveness, and is a splendid shipper. It is grown largely in the South for this purpose. The Melons ripen evenly, the vines are vigorous and bear many Melons of splendid size. Oval, very heavy and with a rind which is very thin but firm. In color it is a light green, slightly veined with a darker shade. The flesh is a bright red, very tender and sweet. Sweetheart remains a long time in good condition after being ripe. We have a splendid strain of seed, which should produce a very uniform crop. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c. By Express not paid, 5 lbs., \$2.00; 10 lbs., \$3.75.

Pride of Georgia—A dark green, oval variety; very fine, large, second-early sort; a good shipper and keeper. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c.

Round Dark Icing—One of the sweetest of all Watermelons. Very solid; thin rind; rich red flesh. Quite early and noted for its splendid quality. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c.

Round Light Icing—The fruits are small-medium, nearly round, greenish white, slightly veined or dotted with light green. The flesh is bright, light red, very sweet and tender. Seed white. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c.

Grey Monarch, or Long Light Icing—Very large; oblong in shape, crimson sweet flesh. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 75c.

Seminole—One of the best large, long Watermelons. Early, enormously productive and of most delicious flavor. Of two distinct colors—gray and light green. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c.

Improved Dixie—Fruit beautifully striped; surpassed by few for shipping or table; long keeper; flesh very red, sweet and juicy. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c.

Phinney's Early—One of the first to ripen, of good size and very productive; oblong; rind a distinct mottled color; flesh deep red; quality excellent. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c.

Livingston's Orange

The peculiarity of this fine Melon is that when well ripened the inner core separates from the rind, as shown in our picture. Frequently one can lift the entire heart of the Melon out of the shell or rind by carefully cutting the Melon rind only. It will be noticed that the inner portion of the Melon quite resembles an orange after peeling, hence the name. The flesh of this Melon is of a beautiful pink shade and fine quality. It grows to a medium size, is productive and, taken altogether, is a very desirable variety. Crop short. Pkt., 10c.

Livingston's Orange

Sweetheart

Ice Cream—True White Seeded

The Great Kitchen-Garden and Home-Market Watermelon—This old standby has too thin a rind for shipping unless packed in straw. Few varieties, if any, surpass True Ice Cream Watermelon for quality and productiveness. Ours is not the Peerless Ice Cream, but the original type very carefully selected and is fancy stock. Of good size, medium early, fruit oblong; rind light mottled green; right flesh, and solid to the center; melting and delicious. Free from hard core or stringiness. An elegant sort. Seeds white. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Fordhook Early

The earliest and best Melon of good size. Next to Cole's Early in time of ripening, but much larger. Fruit round; outer color, dark green; flesh is bright red, of fine quality. Good shipper. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Kolb's Gem

Probably the most extensively grown for long distance shipping of any Watermelon ever originated. The flesh is right red and of good flavor. Melons large, of very thick, oval blocky form; skin handsomely marked in stripes of light and dark green. One of the most productive and best keeping Melons. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c. By Express not paid, 5 lbs., \$2.00; 10 lbs., \$3.50.

Georgia Rattlesnake, or Striped Gypsy

Very large, long, smooth and distinctly striped; flesh right scarlet, very crisp and sweet. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Alabama Sweets

Large, dark green Melons of oblong shape and fine quality; skin faintly netted with lighter green stripes. Flesh bright red, of delicious flavor. A good shipper. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Peerless

One of the best for home gardens and market gardeners, who deliver direct to customers. Medium size; flesh red, tender and delicious. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c.

Preserving Citron

Red Seeded; most desirable for preserves; flesh solid and white. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Other Good Watermelons

We can also supply the following varieties at the uniform price of—Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c. **Mountain Sweet, Triumph and McIvers' Wonderful Sugar.**

Edgar W. Pickering, Palm Beach Co., Fla., writes Dec. 11, 1916: "In our district we have had very dry weather for the last five weeks, but each and every seed bed of our seed has come up with the adverse conditions. Most seed dealers down here advocate Florida grown seed only, but I prefer Northern seed. In the first place, one can scarcely keep seed from one season to the next here as the climate is against the keeping of seeds."

Seta Livingston's Sure-Crop Mushroom Spawn *Champignonbrut*

Mushrooms will usually do well almost anywhere if a fairly uniform temperature can be maintained. One pound of Spawn is sufficient for a bed 2x6 feet. We receive fresh Spawn several times a year from the best makers. A careful study of one of the special Mushroom books will help you to be successful. Send for list of books.

English Milltrack Spawn

(Livingston's Sure Crop)—Lb., 25c.; postpaid. By express or Parcel Post, at buyer's expense; 5 lbs., 70c.; 10 lbs., \$1.25; 25 lbs., \$2.75; 50 lbs., \$5.00.

American Pure Culture Spawn

Produced by the new grafting process from selected and most prolific varieties. Produces a crop very uniform in size and color. Per brick, 35c.; postpaid. By express or Parcel Post, at buyer's expense; 5 bricks, \$1.00; 10 bricks, \$1.85.

Mostaza Mustard Seed

Used as a condiment; the green leaves are used as a salad, or cut and boiled like spinach. Cultivate same as Curled Cress or Pepper-Grass. One ounce of seed will sow 50 feet of drill.

Fordhook Fancy—The plants, of vigorous growth, have beautiful dark-green leaves. It is most productive from early Spring sowings, and stands well, even during the hot Summer months. By making several sowings a few weeks apart, a continuous growth of fresh tender leaves may be had throughout the season. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Southern Giant Curled—Is highly esteemed in the South, where the seed is sown in the Fall and plants used early in Spring as a salad. Seeds brown. Plants are 2 feet high; enormous bunches. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Chinese—A giant curled variety with leaves double the size of the ordinary. Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

White English—Leaves are light green, mild and tender when young; seed light yellow in color. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 50c.

Brown or Black Mustard—More pungent in flavor than the White. Seed black. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 40c.

Mrs. J. D. Ewig, Perry Co., O., writes: Received your collection of seed and it is the biggest collection I have ever seen for one dollar—was very much pleased with it. Send me your catalog every year and I will continue to buy from you.

Perkins Mammoth Okra

Orka or Gumbo

Very wholesome. The pods, when young, make a fine soup. Plant seed after the ground is warm and dry in drills 3 feet apart, thinning the young plants to 1 foot apart. Make early and late sowings to secure a supply throughout the season. Easy to grow in any good garden soil. One ounce of seed will grow 40 feet of drill.

Southern Giant
Curled Mustard

White Velvet—Distinct in appearance; the large pods are perfectly round smooth, and attractive velvety white, of superior flavor and tenderness. Plant dwarf, of compact branching growth; very prolific. Pkt., 5c.; oz., 10c.; ¼ lb., 15c.; lb., 45c.

Perkins' Mammoth—Plant dwarf; are very productive. Produce beautiful, long, slender, deep green pods, which remain tender a long time. An extra choice variety. (See illustration alongside.) Pkt., 5c.; oz., 10c.; ¼ lb., 20c.; lb., 65c.

Kleckley's Favorite—Plants are of compact growth, with many close joints. At each leaf joint develop handsome, smooth, white pods which average 6 inches long, by 1 inch in diameter. They are exceptionally fleshy and tender. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Rev. F. L. Carson, Vermillion Co., Ill., writes: "I am sending you an order for seeds and find in looking over my records that this make 28 consecutive years that I have ordered your seeds. Let me say that we always find them to grow and give good results as to quality of vegetables, etc. The length of time we have ordered ought to be an indication that we are pleased."

Cebollas **Choice Onion Seed** Zwiebeln

Culture Onion Seed should be sown as early in the spring as possible to get the ground in shape even though the weather is cold. Thorough preparation of the soil is one of the most essential points in successful onion growing and should not be slighted no matter how large or how small the area. Fall plowing is desirable on most soils as it will eliminate more or less hand raking in the Spring which is necessary in the preparation of a proper seed bed. Onions delight in a rich, deep, sandy loam, but excellent yields can be obtained from heavier soils properly fertilized. Large quantities of well rotted manure should be used when obtainable, also high grade commercial fertilizers containing a large percentage of potash. Sow the seed in drills twelve to fourteen inches apart and about one-fourth inch deep. After they are well started, or about three or four inches high, thin out to stand two to four inches apart, keeping them well hoed and free from weeds at all times. **Complete cultural leaflet free to customers.**

Livingston's Ohio Yellow Globe

Most Perfect Strain of Yellow Globe; Sure Cropper; Enormous Yields; Long Keeper; Early.

We name it "Ohio Yellow Globe" Onion to designate it from the many strains of Globe Danvers Onion now being offered. To Ohio growers belongs the honor of producing, by many years of painstaking care, selection and cultivation, this **finest strain of that extreme type of Globe** now so deservedly popular in all large Onion markets. Its main points of excellence are: **Distinct and attractive shape; handsome, bright, even color; necks very small; ripens early and all at once. The solid bulbs are excellent Winter keepers, and all that can be desired in size and quality; enormous yields—800 bushels per acre are frequently grown on rich Onion land. This is a superb Onion for all classes of soil (well enriched) and especially good for all our muck lands.** Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.15; lb., \$4.00.

Livingston's Ohio Yellow Globe

Southport White Globe

The handsomest Onion grown. Of beautiful silvery-white color, perfectly globe-shaped, uniform in size. Flesh firm, fine-grained and of pleasant flavor. **Southport White Globe** as grown in the rich muck soil of our Kirkersville farm comes very beautiful and true to type. Of true globe type, solid and with very small neck. We grow a large acreage of bulbs every year, and firmly believe that a better strain than ours does not exist. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 45c.; $\frac{1}{4}$ lb., \$1.45; lb., \$5.25.

Select Yellow Globe Danvers

Of large size, an early and abundant cropper, very thick bulb, flat or slightly convex bottom, full oval top with a small neck and rich brownish yellow skin. We consider our strain of Globe Danvers just right for critical growers. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.10; lb., \$3.75.

Yellow Flat Danvers

A splendid extra-early yellow Onion for market or home use, and for sets. Flatter than the Globe Danvers; long keeper; flesh white, fine quality. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

Yellow Dutch, or Strasburg

One of the most popular varieties for yellow Onion sets. It is also a good-keeping half-round sort for home use. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

Southport Yellow Globe

Produces large, perfectly globe-shaped bulbs. Color of the skin is brownish yellow. Flesh white, fine grained and crisp. Quite similar to Yellow Globe Danvers, but a little later and of larger size. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Southport White Globe

T. M. Anderson, Knox County, Ky., writes: Jan. 2, 1917: "The Yellow Globe Onions raised from the seed last year were large and of fine flavor. I sold some at a dollar a peck. I know where to come to get good seed after this."

Mammoth Prize-Taker Onion

Mammoth Yellow Prize-Taker

This is the large, beautiful Spanish variety so often seen in the fruit stores and markets of all large cities. Enormous size—15 to 16 inches in circumference. Although of such great size, it is hardy and a good keeper for such a mild flavor. It ripens up firm and very fine grained. The outside skin is rich yellow, while the flesh is white. Has produced more bushels of marketable Onions to the acre than any other variety. Our stock is American grown. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.15; lb., \$4.00.

Philadelphia White Silver Skin

A good-sized white variety when full grown, and makes a most beautiful, firm, round, pearly white Onion set, for which it is very extensively grown the country over. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.35; lb., \$4.75.

Livingston's Choice Onion Sets

Early green Onions are obtained much earlier by setting out sets than by sowing seed. Some of the latter, however, should be sown to follow the crop grown from the Onion Sets. Plant both Onion Sets and Seed as soon as the ground is warm and dry in the Spring.

Our Set Prices are based on the present market rates and are subject to market changes. It is impossible for us to make fixed prices. Lowest market prices on large or small quantities will be given on application at any time. **We handle Onion Sets in large quantities.** A pound of Sets is equal to about a quart measure.

Standard Onion Sets (Bottom Sets)

Are grown from seed sown very thick in broad, shallow furrows, and covered about half an inch deep. **These are the little Onion Sets so much planted for first early Onions.** One bushel weighs 32 pounds.

White Onion Sets, $\frac{1}{2}$ lb., 20c.; lb., 35c.; $\frac{1}{2}$ pk., 75c.; pk., \$1.40; bu., \$5.00.

Red Onion Sets, $\frac{1}{2}$ lb., 15c.; lb., 30c.; $\frac{1}{2}$ pk., 65c.; pk., \$1.10; bu., \$3.75.

Yellow Onion Sets, $\frac{1}{2}$ lb., 15c.; lb., 30c.; $\frac{1}{2}$ pk., 65c.; pk., \$1.10; bu., \$3.75.

Prizetaker Onion Sets—Write for prices.

White Multipliers

Pure, silvery-white, enormously productive, frequently 20 bulbs in a cluster from a single bulb. Of excellent quality and size for bunching green, or can be ripened for pickling Onions. Remarkably good keeper; very early. $\frac{1}{2}$ lb., 20c.; lb., 35c.; 10 lbs., \$2.50; 25 lbs., \$5.50.

Egyptian Winter, or Perennial Tree Onions are sold only in the Fall. See Fall Catalog regarding this variety, as Autumn is the time to set them out.

Livingston's Yellow Beauty Onion

Grows the Hardest, Smoothest, Roundest, Best-Keeping Onions in Onion Sets

Livingston's Yellow Beauty is a lemon-yellow sort, of very fine and firm texture, especially adapted to growing sets and Onions for late Spring sales. They often keep until June in fine condition. Crop short. Pkt., 10c.; $\frac{1}{2}$ oz., 30c.; oz., 50c.

Livingston's Brown Beauty

This sort is very similar to our Yellow Beauty except in color, which grows somewhat darker as the Winter advances. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.

Australian Brown

This variety has become very popular, because of its good keeping qualities. The bulb is medium sized, nearly spherical, being slightly flattened; reddish brown in color and very solid rather strong flavored. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Indiana Silver Skin

This is a strain of pure white Onion that produces round hard Onion sets, for which we highly recommend it to you. The bulbs when fully matured are flat and one of the best keeping white varieties. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.35; lb., \$4.75.

Southport Red Globe

The handsomest of all the red Onions; large and of perfect shape. Red Globe is the latest of the Southport Onions, ripening from a week to ten days after the yellows. The bulbs are remarkably uniform in shape, of a rich red color, ripen evenly and yield a large percentage of marketable Onions. Flesh pinkish-white. They ripen down hard, keep well, and their beautiful appearance helps to sell them. Southport Red Globe will yield a heavier crop than either the Yellow or White Globe. Our strain of the Red Globe is unsurpassed. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.25.

White Portugal, or Silver Skin

Matures early; rather flat in shape; mild flavor; excellent for Winter; very much esteemed for pickling when small. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.35; lb., \$4.75.

Large Red Wethersfield

This is a standard red variety. Large size; skin deep purplish-red; form round, somewhat flattened; flesh purplish-white. One of the best keepers. Yields enormous crops. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

Extra-Early Red

Medium size, very uniform in shape; smaller than Large Red Wethersfield, but two weeks earlier; good keeper; desirable for early market and planting in the North. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Perejil Parsley Petersille

Parsley is used for seasoning soups and stews, for salads, and is also very universally used for garnishing, also for ornamental borders in the flower garden; succeeds best in a rich, mellow soil. As the seeds germinate very slowly, three or four weeks sometimes elapse before it makes its appearance. It should be sown early in the Spring. One ounce of seed will sow about 150 feet of drill.

Livingston's Exquisite

One of the main features in any variety of Parsley is the ornamental effect of its leaf when used for garnishing. This is a very strong point in our Livingston's Exquisite, with its very elegant and closely curled leaves of beautiful dark green, while the flavor is all that could be desired. As a pot plant for Winter decoration it is simply "exquisite." The best strain of Curled Parsley that has ever come under our notice. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Fine Double Curled

Dwarf, beautifully curled; very fine variety. Pkt., 5c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Champion Moss Curled

More densely crimped and curled than some other sorts. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 25c.; lb., 75c.

Plain

Much used for soups and stews; rather stronger in flavor than other varieties. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.; lb., 65c.

Hamburg, or Turnip Rooted

A rooted variety; the fleshy roots resemble Parsnips, and are used in soups and stews. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.25.

Chirivia Parsnips Pastinake

Sow early in the Spring as the weather will permit, in drills 15 inches apart and half an inch deep, in rich, well-manured ground, well dug. Cultivate similar to Carrots, and thin to 6 inches apart in the rows. The roots improve by being left in the ground until Spring, securing enough in pits or the cellar for Winter use. One ounce of seed to 200

Large Sugar, or Hollow Crown (Improved Guernsey)

White, smooth, sugary, excellent flavor, easily harvested. See illustration.) Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Long White Dutch

Roots are very long and smooth; one of the best varieties for general use. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Parsley—Livingston's Exquisite

Bolla Heikes, Market Gardener, Montgomery Co., Ohio, writes: "Everything has done fine for me this year. All of your seed have been good and true to name and I am well satisfied." (Mr. Heikes order consisted of fifty-one items.)

C. H. Goad, Knox Co., Ill., writes: "I wish to thank you very kindly for your prompt attention and assure you that I appreciate the favor very much. I also wish to say that I am having very good success with the vegetables I am growing from your very good seed."

B. H. Takvorian, Jasper Co., Mo., writes: "The Capitol Lawn Grass Seed which I ordered from you about six weeks ago is doing well. I believe I will have a green lawn in another month. I am well pleased."

Chicarow
o Gulsantes

Livingston's Choice Peas

Ersben

Peas thrive better if the ground has been manured for a previous crop, but if the ground is poor and requires enriching, use well-rotted manure; and for the dwarf varieties you can hardly make the soil too rich. When grown as a market crop, Peas are seldom staked or bushed, but are sown in single rows 3 to 4 inches deep, the depth depending on the time of sowing, nature of the soil, as well as the variety. Wrinkled varieties are not as hardy as the smooth sorts, and if planted early should have dry, warm soil, and not planted deep, or they are liable to rot in the ground. These wrinkled varieties are, however, the sweetest and best flavored. Rows for planting should be from 2½ to 3½ feet apart, according to the kind, soil and manner of culture desired. When grown in the kitchen garden it is best to sow the seed in double rows, 6 to 8 inches apart, the tall sorts requiring brush. **Two pounds sow 100 feet of row; 1½ bushel for an acre.**

Pea Prices

Our Pea Prices include postage up to and including two pounds. If any of the larger amounts are wanted sent by mail it will be necessary to remit extra to cover postage at the Parcels Post rates.

Livingston's First-in-Market

Excellent variety, very profitable for the gardener and shipper, because it ripens uniformly, so that almost every pod may be gathered at one picking. The pods are handsome, straight and full of medium-sized round Peas of superior quality; it is immensely productive for such an early sort. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.; ½ pk. (7½ lbs.), \$1.60; pk., \$2.75.

Peter Pan

A very promising new early sort with dark green pods and peas. Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 95c.; ½ pk., \$2.25; pk., \$4.00. For description see novelty pages.

Thomas Laxton

Buttercup

An improved Carter's Daisy. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.; ½ pk., \$1.65; pk., \$3.00.

Market Surprise

A large podded extra-early. Pkt., 15c.; ½ lb., 25c.; lb., 45c.; 2 lbs., 85c.; ½ pk. (7 lbs.), \$1.90; pk., \$3.50.

Buttercup and Market Surprise are fully described in novelty pages.

Little Marvel

This Pea has been rightly named. It is an early wrinkled Pea with all the good qualities of American Wonder, Premium Gem and Nott's Excelsior and some of its own besides. It grows about 15 inches tall and bears heavily. There is no earlier wrinkled Pea and the quality satisfies everybody. Our sales increase yearly because Little Marvel never disappoints. If you are not already using this sort, order it this year, for it is a dandy. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.; ½ pk. (7 lbs.), \$1.60; pk., \$2.85; bu., \$10.50.

Laxtonian Peas

This is a giant podded, early, dwarfed Pea—the same size and quality as Gradus, but requires no supports. We regret our crop of Laxtonian failed. And we only carried over a small quantity. The Pioneer will be found quite similar and should be given a liberal trial. We offer the Laxtonian while they last. Pkt., 15c.; ½ lb., 30c.; lb., 50c.; 2 lbs., 95c.; ½ pk. (7 lbs.), \$2.25; pk., \$4.00.

Livingston's Selected Extra-Early Alaska

This fine Pea has become a standard extra-early market variety, and is the earliest of all blue Peas; grows about 30 inches tall; very uniform in maturing the crop. Our strain is especially fine. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.; ½ pk. (7½ lbs.), \$1.60; pk., \$2.75.

American Wonder

A leading dwarf wrinkled Pea; esteemed for earliness, productiveness, flavor and quality. Strong and robust in habit, growing about 10 inches high, and produces a profusion of good-sized pods, which are fairly packed with the finest flavored Peas. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.; ½ pk. (7 lbs.), \$1.60; pk., \$2.75.

Thomas Laxton

A Fine Wrinkled Pea

The vine grows about 3 feet high, much like that of the Gradus, or Prosperity, but more hardy and greatly more productive. Pods large, long, with square ends, similar to but larger, longer and handsomer than those of the Champion of England, and fully as uniformly well filled. The green Peas are very large, fine colored and unsurpassed in splendid quality. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.; ½ pk. (7 lbs.), \$1.60; pk., \$2.75.

Little Marvel

Livingston's Prolific Early Market

For length of pod, number of Peas in a pod and number of pods to a vine, this is a wonder. It is one of the smooth-seeded, extra-early varieties which can be sown the first thing in the Spring, and for the type of Pea the quality is all that can be desired. Large pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 70c.; ½ pk. (7½ lbs.), \$1.40; pk., \$2.50.

Nott's Excelsior

This fine extra-early dwarf wrinkled Pea is very popular. Foliage dark green and rather heavy, suggesting health and vigor. On good soil grows about 1 foot high. Pods one-third larger than American Wonder and are all ready to pick at once; a great yielder. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 70c.; ½ pk. (7 lbs.), \$1.40; pk., \$2.50.

Premium Gem

A very fine Extra-Early Dwarf Pea of Little Gem type, on which it is a decided improvement; pods are larger and more productive. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 70c.; ½ pk. (7 lbs.), \$1.40; pk., \$2.50.

Livingston's Home Collection of the Three Best Peas for the Private Garden

The varieties contained in this collection are all superior wrinkled sorts—sweet, tender and delicious. It contains early, medium and late sorts, and will supply the table with a succession of luscious Peas for a long period.

Little Marvel—A fine dwarf early variety; very prolific and of excellent quality.

Thomas Laxton—Bears large pods literally packed with luscious Peas early in the season.

Alderman—One of the largest of the late Peas and a tremendous cropper of handsome pods and peas.

One 15c. packet each of 3 Best Peas, 40c.; 1 lb. each, \$1.10, not prepaid.

Gradus or Prosperity

(See Illustration)

This extra fine variety combines earliness with large size in a green wrinkled Pea. In earliness the Gradus follows closely after the First Earlies, being only two or three days later than Livingston's First-in-Market. In height they grow about 2½ feet. The pods are long and straight; and well filled with luscious sweet peas of superb quality. It produces most uniformly large pods, measuring 4 to 4½ inches in length, and well filled with large, handsome peas. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.; ½ pk. (7 lbs.), \$1.20; pk., \$2.85; bu., \$10.50.

McLean's Advancer

The leading Pea for second-early. Excellent flavor, very productive. It is a wrinkled variety, grows about two feet in height. Has long pods, and well filled to the end. Ripens so uniformly that the vines can usually be picked clean in two pickings. Pkt., 10c.; ½ lb., 15c.; lb., 30c.; 2 lbs., 55c.; ½ pk. (7 lbs.), \$1.00; pk., \$2.06.

Potlatch

A variety of great value, growing 15 to 18 inches high, with very large pods, measuring up to 6 inches in length. Vines and pods are a rich, dark green, and pods contain 8 to 9 immense peas. The plant is a vigorous grower, the pods being borne in pairs. It is a great producer and the quality of Peas which shell out is surprising. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.; ½ pk. (7 lbs.) \$1.60.

Sutton's Excelsior

A fine wrinkled Pea quite hardy and may be planted with the hard-seeded varieties. The plants are dwarf (about 15 inches high), of vigorous growth and very productive. The quality is all that could be desired. Sutton's Excelsior produces larger and broader pods than most early varieties and it matures within a few days of Nott's Excelsior. It is a desirable variety for home and market use. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 70c.; ½ pk. (7 lbs.), \$1.40; pk., \$2.50.

Pioneer Pea

A new large podded early Wrinkled Pea of great promise. The vines are extremely vigorous, growing fifteen to eighteen inches high, dark green and produce a wonderful crop of dark green pods which are filled with big Peas of delicious flavor. It is one of the earliest Wrinkled Peas, coming about the same season as Gradus, but a heavier cropper. Try this one in place of Laxtonian, which we cannot supply, in quantity, this season. Crop very short. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.

Gradus or Prosperity

Alderman

(See Illustration)

The Alderman is a late wrinkled variety growing four to five feet high and bearing freely, large pods of a dark green color. These pods each contain eight or nine large dark green Peas of unsurpassed flavor. Alderman will eventually take the place of Telephone in markets requiring a dark green pods and Peas. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.; ½ pk. (7 lbs.), \$1.60; pk., \$2.75.

Quite Content

Largest Podded of Any. Season Same as Telephone—This variety has created a sensation by its vigor and size, being by all odds the largest Pea in existence. The pods, which are usually produced in pairs, being from five and a half to six inches in length and each pod contains from nine to eleven large Peas of fine quality. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.

Other varieties of Peas are offered in the Novelty pages.

Carter's Telephone

The favorite late variety for the market gardener. Extra large pods. Vine large, coarse leaves, height about 4 feet. The pods are very large and filled with immense Peas. Tender, sweet and of splendid quality and flavor. Pkt., 15c.; ½ lb., 25c.; lb., 45c.; 2 lbs., 80c.; ½ pk. (7 lbs.), \$1.80; pk., \$3.35.

Champion of England. An old variety, but considered by many the best tall growing sort. To do its best it needs support. A prolific bearer of large pods, well filled with large wrinkled Peas. Five feet high. Crop very short. Pkt., 15c.; ½ lb., 25c.; lb., 45c.; 2 lbs., 85c.; ½ pk. (7 lbs.), \$1.90; pk., \$3.50.

Livingston's Prolific Giant-Podded Sugar. Excels all other Sugar Peas in size, productiveness and quality. Vines are about 30 inches in height. The pods are gigantic in size, broad, sweet and tender, extremely fleshy and equal to the best Snap Beans for cooking pods and all. Pkt., 10c.; ½ lb., 15c.; lb., 30c.; 2 lbs., 60c.; ½ pk. (7 lbs.), \$1.25; pk., \$2.15; bu., \$8.00.

Improved Stratagem. The vines are strong, vigorous and covered with immense pods, many of which measure nearly 5½ inches in length and containing as high as ten large, richly flavored wrinkled Peas. The quality is excellent. Pkt., 15c.; ½ lb., 25c.; lb., 40c.; 2 lbs., 75c.; ½ pk. (7 lbs.), \$1.65; pk., \$3.00.

Alderman

Pimento Choice Peppers Pfeffer

Peppers should be started in a hotbed or cold-frame and transplanted about the end of May into a sunny corner of the garden, in rows about 2 feet apart, with the plants about the same distance between them in the rows. They can also be sown in open ground in a prepared seed bed when all danger from frost has passed and the weather has become settled and the soil warm. When the little plants are about 3 inches in height, transplant as above into the rows where they are to remain. Some very rich fertilizer stirred into the soil when the plants are about 6 inches high will be found very beneficial to the crop. The Peppers intended for mangoes should not be grown near the hot varieties, as if so they will partake of their fiery nature. One ounce of seed will produce about 1500 plants.

Livingston's Prolific Yellow

Fruits bright yellow when ripe; just right size for stuffing; very productive. (For full description see novelty pages.) Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.10; lb., \$4.00.

Sweet Salad Pepper

(Pimento)—Also Known as Perfection—This Pepper is especially desirable for canners. It is also fine for the home garden, both green and ripe. It is so smooth and uniform in shape that the skins can be easily slipped off after burning over a hot fire a few seconds or by boiling a few minutes in hot water. It can also be pared like an apple by using a sharp knife. The green meat is from two to three times as thick as that of the peppers can be pared best in this way. The hull or old "Bell" types, and yields about a half more edible product to the same measurement.

Quality very sweet and delicious and entirely free from pungency. Color when ripe a beautiful scarlet red. Very productive, yielding heavy crops until cut off by frosts. It is largely grown by canners for pimentos, pickles and pulp. Pkt., 10c.; ½ oz., 15c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

Royal King

A new thick-meated pepper of the Ruby King type. See specialty pages for description. Pkt., 15c.; ½ oz., 30c.; oz., 50c.

Sweet Salad (Pimento)

Sweet Upright

This sort produces a greater number of fruits than the large sweet Peppers. The fruits are just the right size to serve whole, not large, about 3 inches long, 2½ inches to 3 inches across. The flesh is quite thick, mild and sweet, and the skin very tender. The color of the ripe fruit, both skin and flesh is a rich, brilliant scarlet. Grows upright on the stem, hence its name. Pkt., 5c.; ½ oz., 20c.; oz., 35c.

Tomato Shaped Pepper (Pimento)

Very Thick Meated and Mild

This very popular variety used extensively by the Spanish people in their Pimento salads. It is a thick meated variety of mild flavor, being brilliant red in flesh, and very productive. Pkt., 10c.; ½ oz., 25c.; oz., 45c.

Livingston's Ohio Crimson

The Sweetest and Biggest Mango Pepper

(Introduced by us in 1906.) Habit of growth, robust and stocky, and a sure cropper. The fruit is extra large. It weighs Livingston's Ohio Crimson is much heavier than other varieties of the same size owing to thicker flesh. In flavor it is the mildest we have ever known, as the flesh, and even the seeds, may be eaten from the hand without any of the fiery sensation. Growers tell us their customers prefer it to others for making mangoes. Livingston's Ohio Crimson has been thoroughly fixed in type for years. Pkt., 15c.; ½ oz., 30c.; oz., 50c.

World Beater

Said to be a cross between Ruby King and Chinese Giant. The shape is like Ruby King only the blossom end is broader and the size nearly equal to Chinese Giant. The plant is a strong, vigorous grower and very prolific. The fruit is a beautiful scarlet in color and exceedingly mild. The flesh is thick and firm making this variety an excellent shipper. Pkt., 10c.; ½ oz., 25c.; oz., 40c.; ¼ lb., \$1.35; lb., \$4.75.

Neapolitan

This is the earliest of the large, mild red Peppers, grows about two feet high and is completely laden with fine Peppers about four inches long and three inches in diameter. Worthily of a place in every garden. Pkt., 5c.; ½ oz., 15c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

Giant Golden King

An exact counterpart, except in color, of the Ruby King. Bears large, handsome fruits of most attractive bright yellow. Flavor mild and pleasant. Pkt., 10c.; ½ oz., 25c.; oz., 45c.

Mammoth Ruby King

Our Mammoth Ruby King Pepper is one of the largest and finest mild Red Peppers in cultivation. Not only is it very productive for so large a Pepper, but its splendid size and handsome appearance make it sell most readily in any market, and for the kitchen garden it is a special feature. The plants are vigorous, stocky and dwarf; very bushy, growing about 2 feet in height. They are well branched; thickly set with large fruits, some 5 to 6 inches long by about 3 inches thick. When ripe they are of a beautiful bright, glossy red color, and are always remarkably mild and pleasant to the taste. They can even be sliced and eaten with salt and vinegar (like Tomatoes or Cucumbers), and are most appetizing. Pkt., 10c.; ½ oz., 25c.; oz., 45c.; ¼ lb., \$1.40; lb., \$5.00.

Mammoth
Ruby King

Livingston's Improved Thick Long Red

A great improvement on the ordinary Long Red Cayenne—Pods of about the same length, but much thicker. (See illustration, which is of average size.) The flesh is fully double the thickness of Long Cayenne. They are grown almost exclusively for some markets. Exceedingly prolific; are very hot and have handsome bright red pods. Produced early in the season while prices are high. Pkt., 10c.; ½ oz., 15c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Small Cayenne (Red Chili)—Pods 1½ to 2 inches long; very hot; used for making pepper sauce. Pkt., 5c.; ½ oz., 15c.; oz., 25c.; ¼ lb., 85c.; lb., \$3.00.

Cherry Red—Fruit small, round, rich scarlet and extremely hot. Pkt., 5c.; ½ oz., 20c.; oz., 35c.

Long Red Cayenne—Four inches long and one-half to three-quarters inches in diameter; flesh hot. Pkt., 5c.; ½ oz., 15c.; oz., 25c.; ¼ lb., 80c.; lb., \$2.75.

"Red Hot" Mixture—Includes a great number of small and ornamental sorts, which are as "hot as fire." Pkt., 10.

Chinese Giant

It is of mammoth size, splendid shape, beautiful rich, glossy bright red flesh and mild flavor. Its strong, bushy plants, which are loaded with the splendid large fruits, begin bearing quite early. Has few seeds, hence necessarily high in price. Pkt., 15c.; ½ oz., 30c.; oz., 50c.; ¼ lb., \$1.50.

Large Bell, or Bull Nose

An early variety and of mild flavor except in hot, dry seasons. The skin is quite thick and fleshy; of medium size; is quite popular in some sections. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.10; lb., \$4.00.

Sweet Mountain

Very similar to Bell or Bull Nose; sweet and mild flavored; used for stuffing. Pkt., 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.10; lb., \$4.00.

Mixed Mango Peppers—A choice mixture, containing a very large number of varieties suitable for stuffing and mangoes. Pkt., 10c.

Calabazas Livingston's Prize Winning Pumpkins Speise Kurbisse

Pumpkins are not so particular in regard to soil as Melons or Cucumbers, but in other respects are cultivated in a similar manner. Sow in the month of May, when you plant your corn. Make hills, the same as you do for Squashes, but about 8 or 10 feet apart each way. It is preferable to grow Pumpkins in the field, and not in the garden, as they always mix badly with the Squashes and other vines. You can sow some amongst your late corn, putting in a few seeds, say, every third or fourth hill. This will give you plenty for the table, and your stock the coming Winter. One ounce of seed will plant 15 hills; 3 to 4 lbs. plant an acre.

Improved Thick Long Red Pepper—Large, round, flattened, hardy and productive. One to two feet in diameter. It has thick flesh of extra fine quality and is a splendid sort for canning, family and market use; and used largely for stock feeding. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 85c.

Japanese Pie—Crooked neck; quality fine; very productive; ripens early; medium size; skin dark green; flesh orange yellow. Excellent for pies. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Common Yellow Field—Yankee Cow Pumpkin, or Connecticut Field—The common Yellow Field Pumpkins, so very largely cultivated by our farmers for stock feeding, and used some for canning; very productive. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Small Sweet or Sugar—This is the small, sweet Pumpkin that has made the New England States famous for their pumpkin pies. It is a very fine grained, most deliciously sweet-flavored sort. Splendid keeper. They average about 10 inches in diameter. Deep orange-yellow color. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Livingston's Pumpkin Mixture—One Sowing Furnishes Pumpkins for the Season. Especially offered to those who wish to grow a grand collection of Pumpkins for Fall fairs. Large pkt., 10c.; oz., 20c.; ¼ lb., 50c.

Genuine Mammoth, or True Potiron—(King of the Mammoths)—Of immense size, with depressed ends, slightly ribbed, often 3 feet in diameter and sometimes weighs over 200 lbs.; skin salmon color; flesh bright yellow; fair quality; great exhibition sort. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Mammoth Tours—Immense size, often weighs 100 pounds. Oblong; skin green; good exhibition sort or for feeding stock. Pkt., 5c.; oz., 10c.

Tennessee Sweet Potato—Bell shape; medium size, thick flesh, skin creamy white, fine grained, sweet, delicious. Very fine for pies. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Large Sweet Cheese—Best for Canning. Has heavy, thick, sweet meat; large, round, flattened variety, with creamy-buff skin. An excellent keeper, and very productive; good quality. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 85c.

Eubiarbo Rhubarb, or Pie Plant Rhabarber

Requires a deeply cultivated and thoroughly manured soil. Sow the seed early in the Spring, in rows 1 foot apart; the second year after planting plants can be removed in Autumn to the permanent place in the garden allotted to them. Plant the roots 2 feet apart each way. One ounce of seed gives 500 plants.

Victoria—In general use for market and home garden. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Large Sweet Cheese Pumpkins

Our Strain Rosy Gem Radish Produces Very Uniform Roots

Rabanitos Radishes Radieschen

All varieties thrive best in light, sandy loam. For early use, sow in the hotbed in February, giving plenty of ventilation, or outside in the garden, in drills, as soon as the soil is warm and dry, covering the seed about half an inch deep. Sow every two weeks from March until September for a succession of crisp Radishes for continued use. Radishes must grow rapidly to be crisp, mild flavored and tender. We offer a very fine assortment. **One ounce of seed will plant 10 feet of drill; 8 to 10 pounds for an acre.**

Round and Olive-Shaped Sorts

New Saxa

Fine Greenhouse variety. For full description see specialty pages. Pkt., 10c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.

Rosy Gem

One of the earliest; perfectly globular; rich brilliant scarlet at top, blending into pure white at bottom, tender and crisp; adapted to greenhouse culture; desirable for market or home garden. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Non Plus Ultra (or Fireball)

The earliest forcing Radish in cultivation. A pretty little round Radish; deep rich scarlet in color; tops very small; crisp, tender, white flesh; a little earlier than Scarlet Globe, but not so large. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Early Scarlet Turnip

Quite early, small, round Radish; skin rich scarlet. A great favorite with market gardeners and especially so for kitchen gardens. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Scarlet Globe

This splendid globe Radish is the very finest early strain of the round, bright red Radishes. Nothing can surpass its table excellence or its beauty. The skin is a bright scarlet; flesh pure white, crisp, tender and of delicious quality. Fine for market gardeners as first-early forcing Radish. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Model White Box

Short top, of rapid growth; perfect turnip shape; extra fine quality, remaining solid and juicy for a long time; is especially suitable for growing under glass in frames. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Early Snowball

One of the quickest growing, besides being one of the prettiest round varieties in the whole list; white as snow, smooth as glass, very crisp and extremely tender. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Crimson Giant

A variety combining earliness and great size. It grows much larger than other extra-early varieties, but does not become pithy, even when fully twice as large in diameter and a week older; beautiful crimson-carmine; turnip-shaped; flesh firm, crisp and tender. We recommend it for outdoor garden planting as well as for greenhouse forcing. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Early Snowball Radish

Sparkler

A splendid variety of the Scarlet Turnip White Tipped type, but showing more white, practically the whole lower part being white, while the upper half is a bright scarlet. It makes a fine show on the market bench, is very attractive, and is of good quality. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Scarlet Turnip White Tip

Handsome, bright scarlet, with white tip. Similar to the Sparkler. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

French Breakfast

Of quick growth; very mild and tender; of an oval form, scarlet tipped with white. One of the best real early sorts for home garden. Popular with many growers. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Early Golden Yellow Oval

A very fine olive-shaped variety. Flesh is white and tender. Fine for forcing or out-door culture. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Scarlet Globe Radishes

Early Long Radishes

Cincinnati Market

This superb Radish originated in the vicinity of Cincinnati, Ohio, with the Market Gardeners there and has been continually used by them for many years. We introduced it to our trade in the Spring of 1895, and it has become so deservedly popular that we have had to grow it ever since by the thousands of pounds to supply the demand. The tops are so small that the Radishes may stand touching each other in the rows. The Cincinnati Market Radish grows straight and smooth, 6 to 7 inches in length. (See illustration.) The skin is a beautiful scarlet, very thin, the flesh crisp, brittle, and of delightful flavor. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Livingston's Pearl

A beautiful pearly-white half stump-rooted variety of exceptional merit. It is very firm and solid and after having reached its best condition, it remains in good shape for some two weeks before becoming woody or showing any signs of going to seed. It is a Radish we can heartily recommend and a variety which for all purposes is first-class. Every one who likes a long, white Radish should plant Livingston's Pearl. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Long White Icicle

Grows about 4 inches long; slightly stump-rooted, and of transparent whiteness; short leaves, matures quickly; most excellent flavor; equally desirable for home or market gardens. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Early Long Scarlet Short-Top

Admirable for forcing; the leading outdoor quick-growing variety, both for private and market gardens; the average length is 6 to 8 inches; grows about half out of the ground, straight, uniform; tops small; bright scarlet in color, brittle and crisp. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Half-Long Deep Scarlet

Color deep, rich red. Shape half-long, tapering. Flesh pure white, crisp, tender, brittle, not becoming pithy for a long time. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Brightest Long Scarlet

(Cardinal White-Tipped)—Resembles Early Long Scarlet Short-Top in shape and size, but of a lighter shade of scarlet; extra-early; white tipped; a rapid seller. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 30c.; lb., \$1.00.

Livingston's All-Season Radish Mixture

Livingston's All-Season Mixture of Radish Seed contains all shades and shapes—red, white, pink, variegated; round, half-long and long—in great variety. (See illustration.) Just fine for small gardens, where space is limited, and where you want to make a garden and be done with it. One sowing does for the whole season, as they come ready for your table early, medium and late. You always have some that are just right—sweet, juicy, delicious, crisp. You will be surprised and delighted with our popular Radish Mixture. Your garden this season will not be complete without a bed of these crisp little table delicacies. Large pkt., 10c.; oz., 15c.; 2 oz., 25c.; $\frac{1}{4}$ lb., 40c.

Wood's Early Frame

A few days earlier than the Early Long Scarlet Short-Top, which it resembles; an excellent half-long forcing variety, and for first sowing outside, as it is quite hardy. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Cincinnati Market

Radishes continued
on page 48.

White Strasburg

Handsome, oblong, tapering shape; both skin and flesh pure white; flesh firm, brittle, tender, and possessing the most desirable character of retaining its crispness, even when the roots are quite large. Excellent for Summer use, as it withstands severe heat and grows quickly. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Large White Summer Turnip

A favorite with market gardeners. Round, smooth; very white; crisp and tender; of large size. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Giant White Stuttgart

Of large size; in shape like a top; flesh and skin white; fine quality; firm and brittle, never pithy; can be stored for Winter the same as Turnips. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Golden Globe

Most perfect globe shape; golden colored skin; very quick grower; white flesh, tender, brittle; long standing. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

White Chinese Winter**Lady Finger****Or Long White Vienna**

Beautiful in shape; skin and flesh are pure white, very crisp and tender, a most rapid grower and long standing. A fine variety. Pkt., 5c.; oz., 15c.; ¼ lb., 50c.; lb., \$1.75.

Improved Chartier

A distinct and exceedingly attractive sort; a clear rose colored long Radish, shading into pure waxy white at the tips, attains large size. Perhaps one of the best Early Summer Radishes for the open ground. Grows very fast; ready for use or market early; keeps crisp a long time. Should not be sown until the ground is warm. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

White Delicious

This elegant sort has proven a decided acquisition. Roots are of distinct half-long form, tapering to a point. They grow to good size, are of handsome appearance, and the pure white flesh is crisp, solid and of mild flavor until the Radishes become unfit for use. It does not grow so quickly as White Vienna, but is in good condition much longer. Pkt., 5c.; ½ oz., 10c.

Gray Summer Turnip

Crisp and tender; one of the most brittle Summer Radishes; skin gray; flesh white. A very choice variety. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

L. J. Laurence, Middlesex Co., Mass., writes: "Last year I planted your Globe and Stone Tomato and I had wonderful luck. I think they are best I ever tried to raise and I want to try again this year."

Mr. N. B. Hancock, Goliad Co., Texas, writes December 7, 1916, as follows: "I planted your Globe Tomato last spring and made the finest crop of Tomatoes I ever saw. Won't plant anything else this year."

P. C. Martin, Butler Co., Ky., writes, March 31, 1917: "Your Giant Stringless Green Pod Bean is fine. Perfectly stringless, good bearer and tender. Your Coreless Tomato is the best I ever saw for canning. It is a bright smooth red tomato with but few seeds and a good yielder."

Strasburg**Rabanos****Winter Radishes****Rettige****Chartier or Shepherd****White Chinese**

(**New Celestial**)—(See illustration above.) A large stump-rooted Radish with white skin and flesh. Can be sown from July 1 to August 15, and will keep in prime condition a long time; mild in flavor, brittle and never woody. Fine for market gardeners. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Chinese Rose Winter

A very handsome and distinct variety; color bright rose; crisp and tender; cylindrical in shape; very smooth; very desirable sort; keeps splendidly through Autumn and Winter. A big seller. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Round Black Spanish

Similar to Long Black Spanish except in shape; fine for Winter. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Long Black Spanish

Grows 5 to 8 inches long, 1 to 1½ inches through at top; skin black, flesh white and firm. One of the oldest but nevertheless one of the best Winter sorts. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Sown in Summer and Used in the Fall, or Put Away as You Do Turnips for Winter Use.

Sideracayote

Squashes

Spelse-Kurbisse

Plant after weather has become firmly settled and the ground is warm and dry in hills 5 to 6 feet apart for bush varieties, and 6 to 8 feet apart for running varieties. Hills should be thoroughly manured. Slightly elevate the hills and place 7 to 8 seeds in each, finally leaving but three plants. Press the seeds down firmly before covering, and cover early planted ones, 1 inch deep, and late ones 1½ inches. One ounce of the Bush varieties for 40 hills, or of the large-seeded Winter kinds for 15 hills; 2 to 3 pounds of the Bush sorts, or 4 to 5 pounds of the large-seeded Winter kinds are needed for one acre.

Gregory's Delicious

The result of years of selection and crossing, the Hubbard having been prominently used in its make-up. Green when matured. Flesh thick, dark orange in color; dry, sweet and of rich flavor. Is best as Fall and Winter variety, improving with age. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Livingston's Pie

Rich, Sweet Flavor. Makes Good Pies Without Eggs. The color of the skin is similar to that of the Golden Russet Apple. Flesh yellow and very thick. Quite early, surprisingly productive and a rapid and hardy grower. The very finest for pies, making good ones even when eggs are not used. Size 8 to 10 inches in diameter. Large pkt., 10c.; ½ oz., 15c.; oz., 25c.

Giant Golden Summer Crookneck

The largest and best of all Summer Crookneck Squashes. Of a dwarf, bushy habit and very productive; bears early and all Summer; true Crookneck type; rich golden yellow color; thickly warted. Its cooking qualities are unexcelled. One of the best varieties for the market or table use. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Mammoth Yellow Bush Scallop

(Golden Custard)

Decidedly the best strain of Yellow Scalloped Summer Squash. Double the size of the old sort, retaining all its good points. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Livingston's Improved Cushaw Squash

The genuine Cushaw of "ye olden times," and a great favorite. Very beautiful in appearance, being a distinct mottled green and white striped. Flesh yellow, solid, fine grained, very sweet, and excellent for pies; also good for baking. They average about 15 pounds, but on good rich soil 30-pound specimens are common, and even 35 to 40 pounders are found. They are hardy, and bugs seldom eat them, especially when other varieties are near. Can be grown among corn, same as pumpkins; and yield a good crop, but the better way is to grow them separately on good rich soil, in hills 10 to 15 feet apart each way. Sells well on market and should be in the hands of every grower. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Livingston's
Improved Cushaw

Early White Bush, or Patty Pan

Early White Bush, or Patty Pan

Bears fruits ready for use very early in the Summer. Of true bush and very productive, should be eaten when young and tender. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Mammoth White Bush Scallop

Excellent large strain. Nearly as early as the common sort; creamy white; splendid for market or home garden; good shipper. Pkt., 5c.; oz., 15c.; ¼ lb., 35c.; lb., \$1.25.

Boston Marrow

Oval form, thin skin. Color a rich orange; of good size, excellent flavor and keeps well. Pkt., 5c.; oz., 15c.

Essex Hybrid

Hard shell; solid, thick-fleshed, fine grained, rich flavored; prolific, and of the best quality. Flesh rich orange color. Turban shape. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.; lb., \$1.00.

Fordhook

Convenient size for family use. Flesh dry and sweet, and seems incapable of rotting; if placed in a cool, dry room, keeps in a perfect condition throughout the winter and Spring, until late in June. The thin, hard stem and roots, furnish absolutely no food for the squash borer. Maturing early, it is a sure cropper and immensely productive. Skin thin and meat thick; seed cavity small. May be used at any stage of growth. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.; lb., \$1.50.

Livingston's Squash Mixture

One sowing will produce Squashes for the season. This mixture contains a great variety of Summer and Winter Sorts, just suited for growing for exhibition or table use. Large pkt., 10c.; oz., 15c.; ¼ lb., 35c.

From Johnson's Greenhouses, Wyandot County, Ohio, writes: "Please find enclosed our seed order for this Spring, which is ample proof that we rely on Livingston's Seeds."

From J. H. Batson, Des Moines Co., Iowa, writes: "Will you please send me your seed catalog for this year. I have last years, and I bought seed of another firm last year because I got them cheaper, but only about one-fourth of them grew and what did grow was not what they were supposed to be, and I don't want the same experience again."

Mrs. Stuart Anderson, Weld Co., Colorado, writes Sept. 22, 1917: "I had such a lovely garden this year, and find your seed produce just what you claim for them. I want to be sure and get your 1918 catalog."

J. A. Reed, Stark Co., Ohio, writes Feb. 9, 1917: "Wish to say that the finest lot of tomatoes I ever raised was from seed of your Paragon. Have never found anything in sweet corn to beat Columbus Market."

A row of "Warted Hubbards" as grown at "True Blue" Farms

Chicago Warted Hubbard—Large size, dark green color, distinguished by a dense covering of knots (warts), a sure indication of splendid quality; thick flesh. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Hubbard

The Standard Winter Squash—It is of good size, often weighing 9 to 15 pounds. Color bluish green. Flesh fine grained, sweet and of excellent flavor. Has a very hard shell and will keep until Spring. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Golden Hubbard—Color bright, rich, orange-red; showy and attractive. Shell hard and warty. Flesh deep golden yellow, fine grained and of splendid flavor; cooks dry. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Espinaca Spinach Spinat

Spinach will succeed finely in any ordinary soil, and its cultivation is a very simple matter. It is grown both as a Spring and Summer crop. To winter over for Spring use, plant the seed in August or September, in drills 12 to 14 inches apart. At approach of cold weather, cover lightly with straw or any handy litter. Uncover the plants when they begin to make a new growth in the Spring. For Summer use sow early in Spring. Thin to 3 or 4 inches. **One ounce of seed for 50 feet of drill; 12 to 16 pounds for an acre.**

Improved Thick Leaf (Viroflay)

The market gardener's favorite for Fall or Spring sowing. A great favorite in all parts of the country, as it furnishes an abundance of heavy, broad, dark green leaves of finest quality and appearance. The leaves are attractively curled, and on account of their firmness and substance they remain in prime, salable condition for a long time. Also excellent for home use. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

New Zealand—See illustration. A distinct type of Spinach. The plants grow in branching form, with thick, succulent leaves. The leaves and stems can be gathered at any time after they are well grown and the plants will start out into new growth. Thrives during hot weather and in any soil. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Victoria—An excellent sort, whether grown for home use or market. It may be sown with equally good results either in the Spring or during late Summer and Fall. The plants are fit for use early and remain in good marketable condition much longer than most other kinds. The leaves are very thick and juicy and, when prepared properly, develop a delightfully distinct, mild flavor. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Bloomsdale Savoy—Large wrinkled leaves, upright growth; fine quality. Earliest variety, but will not stand long. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Prickly Seeded Winter—A fine variety with triangular, oblong or narrow-shaped leaves. Hardest of all, therefore best for Fall sowing where Winters are severe. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Long Season—Of flat spreading, but compact growth, this sort is especially noticeable for its short-stemmed, dark-green leaves, which are heavily crumpled and savoyed. For marketing during the warm Summer months, it is unsurpassed. Stands longer before going to seed than any other sort on our list. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Mammoth Chili—Oblong; productive; profitable for stock. Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.; lb., \$1.25.

Mammoth Whale—Often grows 3 feet long; sometimes weighs 100 pounds or over. Slate color; prolific; flesh solid, orange color; quality good; keeps well; suitable for stock. Pkt., 10c.

Salsif Salsify or Oyster Plant Haferwurzel

When properly cooked it is a good substitute for oysters in taste and flavor, and is very nutritious. A most palatable vegetable; the cultivation is precisely the same as directed for Parsnips and Carrots. Salsify will keep finely through the Winter, in the ground where sown, exactly the same manner as Parsnips. The roots are perfectly hardy; in fact, they are best after the frost has touched them.

When cooking, boil with the roots a small piece of codfish, which should be discarded when the salsify is done; codfish strengthens the oyster flavor. When cold, mash, and fry as patties or fritters. This vegetable is also good stewed, plain boiled, and also as a salad, sliced raw in vinegar with pepper and salt. Sow early in drills 18 inches apart and cover firmly one inch deep; thin to three inches apart in the drills. **One ounce of seed will sow fifty feet of drill; eight pounds is sufficient to plant an acre.**

Mammoth Sandwich Island

This splendid variety will average nearly twice the size of the White French Salsify. Grows very uniform. Mild and delicious in flavor. A popular sort with all growers. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

New Zealand Spinach

Ruben Turnips Nabos

First-early varieties of Turnips should be planted just as early in the Spring as the ground is dry and warm. Sow them in drills, beds, or later broadcast, or among corn. The Ruta-Baga varieties, and also the early sorts, will do better if planted in drills; make the drills at least 18 inches apart, and thin out the plants when well up to six inches apart. Cultivate often and thoroughly. We call especial attention to the fact that the Ruta-Baga varieties should be planted as soon as possible after the middle of June, as they need a longer season than the earlier sorts of Turnips. One ounce of seed sows 100 feet of drill; one pound an acre.

Extra-Early Purple-Top Milan

The earliest of the flat Turnips, with a beautiful purple top. They are mild and sweet. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

Extra-Early White Milan

Similar to Purple-Top Milan, except it has pure white skin and flesh. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

Early Snowball

Medium-sized round Turnip; pure white, very fine flavor. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.; $\frac{1}{4}$ lb., 75c.; lb., \$2.50.

Early White Egg

An early variety. Flesh white, firm, fine grained, mild and sweet. A fine Turnip for Winter use. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; lb., \$2.00.

Early Flat Dutch, or White Strap-Leaved

A standard flat variety; good size; pure white; small top, few leaves; good early or late. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Long White, or Cow Horn

Long; grows rapidly, partly above ground; slightly crooked; productive; white, fine grained, very sweet. Used for plowing under to improve the soil. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Seven Top

Cultivated extensively for the tops, which are used as greens. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.50.

Purple-Top Strap-Leaved Turnips

Purple-Top White Globe

A variety of decided merit. Globular shape and of superior quality, either for the table or stock; heavy yield-er. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 50c.; lb., \$1.75.

Purple-Top Strap Leaf

A popular variety for family or market use; white, purple above ground; flesh fine grained; good for Winter use or late planting. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Large White Globe (Pomeranean)

Similar to Purple Top White Globe, except in color, which is pure white; firm, sweet flesh. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Yellow Globe, or Amber

Sweet; large; fine for table or stock. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Golden Ball, or Orange Jelly

Rapid grower; globe shaped; is bright yellow. The best of the yellow sorts for table use. Keeps well. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 15c.; $\frac{1}{4}$ lb., 45c.; lb., \$1.50.

Ruta-Baga

(Swedish or Russian Turnips)

Ruta-Bagas are more especially adapted to sections north of Ohio. They require a longer season for maturing, hence should be sown earlier than Turnips, or about June 15.

Improved American (Purple Top)—Very hardy and productive; flesh yellow, sweet and solid; good for stock or table use. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 70c.; lb., \$2.25.

White Russian, or Large White—Grows very large; excellent for table or stock; flesh is firm, white and solid; the best keeper of any white variety. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 70c.; lb., \$2.25.

Sweet German—An excellent smooth-leaved, medium-large, white fleshed Swedish Turnip sort that requires a long season for maturing and should be sown a month earlier than the flat turnips, but can be kept in good condition well into the winter. The roots are somewhat globular in shape, bronze-green above ground, white below, remarkably solid in texture, sweet and of very good quality. The leaves are rather small for size of root. The roots are in best condition for table use when four to five inches in diameter, but can be grown much larger for stock feeding. Pkt., 5c.; $\frac{1}{2}$ oz., 10c.; oz., 20c.; $\frac{1}{4}$ lb., 70c.; lb., \$2.25.

Purple-Top White Globe Turnips

Livingston's Famous Tomatoes

New Varieties of Merit and the Growing of Large Quantities of Seed Our Specialty We Grow More Tomato Seed than any Other Seed House in the World

Tomatoes occupy continually the center of the stage in our establishment. It is only natural that it should be so. Few seedsmen in the world can make as positive a statement in connection with a crop as we make it above, and for three-score years the interest in this all-important vegetable has been religiously preserved in our house.

We make it a point to know and study all sorts. This is one of the reasons why we can speak authoritatively about the merits of the various sorts introduced. The descriptions given in this catalog may be relied upon. They tell the truth as we learn it from our annual extensive trials. Neither larger nor more thorough trials of tomatoes are made anywhere than those on our "True Blue" Seed Farms. They enable us to "keep posted" for the benefit of our customers, and they also show us, year after year, that Livingston's Famous Tomatoes are the most thoroughbred strains in existence. We give here a complete list of our introductions and no doubt you'll find some old, familiar sorts that have "made good" with you among these varieties.

Livingston's Paragon	in 1870
Livingston's Acme	in 1875
Livingston's Perfection	in 1880
Livingston's Golden Queen	in 1882
Livingston's Favorite	in 1883
Livingston's Beauty	in 1886
Livingston's Potato Leaf	in 1887
Livingston's Stone	in 1889
Livingston's Royal Red	in 1892
Livingston's Gold Ball	in 1892
Livingston's Buckeye State	in 1893
Livingston's Aristocrat	in 1893
Livingston's Large Rose Peach	in 1893
Livingston's Honor Bright	in 1897

Livingston's Dwarf Yellow Prince	in 1898
Livingston's Magnus	in 1900
Livingston's Aristobright	in 1901
Livingston's Royal Colors	in 1901
Livingston's Dandy Dwarf	in 1901
Livingston's Multicolor	in 1901
Livingston's Princess	in 1901
Livingston's Grandus	in 1901
Livingston's Dwarf Stone	in 1902
Livingston's Purple Dwarf	in 1903
Livingston's Globe	in 1905
Livingston's Hummer	in 1907
Livingston's Coreless	in 1908
Livingston's New Manyfold	in 1917

Tomato Culture For very early fruit, the seed should be sown in a hot-bed about the first week in March, in drills five inches apart and one-half inch deep. Later sowings may be made until the last of April. (Sufficient plants for a small garden can be started by sowing a few seeds in a shallow box or flower pot and placing in a sunny window in the house.) When the young plants are 3 to 4 inches high, they should be set 4 or 5 inches apart in another hotbed or cold-frame, or transplanted into small pots, allowing a single plant to a pot. Expose to the air as much as possible to harden them for planting out. Water freely at the time of transplanting into the open ground and shelter from the sun a few days until the plants are thoroughly established. Cultivate thoroughly as long as the vines will permit, but the last two or three workings of the soil should be very shallow or the crop may be badly injured.

Tomatoes grow splendidly trained to stakes or trellises, and the fruit is much improved, not only in appearance, but in quality. This mode of cultivation is quite common among gardeners who grow for early market, and at private places throughout the country; especially in this desirable where neatness and at the same time economy of space in the home garden is desired. The usual method is to set one strong plant to a stake 5 to 7 feet high, tying the plant up with wool or other strong, soft twine, and pruning quite freely as the vine advances in growth. By this method plants may be set much closer than in the ordinary way. For fine, large specimens of high color and attractive appearance generally, grow the clusters of the fruit in paper sacks, as is commonly practiced by grape growers. These paper sacks or bags should be put on when the tomatoes are about three-fourths grown. That about 2000 plants will be produced from one ounce of seed is a safe estimate.

A Portion of the "Globe Breeding Section" at True Blue Seed Farms

Livingston's Globe Tomato

THE GREATEST SHIPPING TOMATO KNOWN

Originated With Us and Introduced in 1905. The Finest Early Purple Tomato in Existence. Very Distinct in Shape, Firm Fleshed, of Delicate Flavor. Almost Blight Proof.

Livingston's Globe is an extra good all-round sort, of a distinct globe shape, with quite a large percentage of elongated fruits, on account of its shape, one that permits of a great number of slices to be made from each fruit. We class it with the first earlies, both in green-houses as well as in the field. The fruits are of large size, and a good marketable size is retained throughout the season. It is always smooth, of firm flesh, and few seeds; ripens evenly; color, a fine glossy rose, tinged with purple, and without the slightest tinge of yellow at any stage of ripening. It is an exceedingly productive variety. In quality there is nothing more to be desired, being mild, pleasant and of delicious flavor. There is no better variety for green house growing or for early growing on stakes or trellises. Its blight-proof qualities are remarkable. May be picked quite green, will carry to distant markets in excellent shape and ripen up uniformly. Pkts., 5c. and 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.50. Special prices in larger quantities.

Tomato Facts is the title of a unique booklet published by us. It tells all about Livingston's Famous Tomatoes and is illustrated with many half-tone reproductions from photographs. Contains many helpful hints on plant production, culture, etc. Free to customers who ask for it.

Livingston's Globe

Livingston's New Manyfold

(Introduced in 1917.) A fine new Livingston variety. See it in colors on outside cover and fully described in specialty pages. Pkt., 35c.; ½-size pkt., 20c.; ¼ oz., \$1.25; ½ oz., \$2.00; oz., \$3.50.

Warning

We do not sell Tomato Seeds to dealers in bulk. All our Tomato Seed is put in packages "True Blue" Seal. We sometimes receive complaints that seeds bought at stores do not turn out as well as ours. The reason: Livingston's Tomato Seeds can only be bought direct from Livingston's or from reliable dealers who handle our seeds in original bags with the "True Blue Seal."

Livingston's Stone

Livingston's Stone

THE GREATEST CANNING TOMATO IN THE WORLD

The Largest, Bright Red, Perfectly Smooth, High-Yielding, Best-Keeping, Finest-Flavored Main-Crop Variety in Existence. Introduced by Us in 1889.

Livingston's Stone is always of good size, deep through from stem to blossom end and very firm. Skin is bright scarlet, perfectly smooth and strong enough to stand shipping and long distance hauling to perfection. Flesh is very solid, and of finest flavor. Seed cells are small and few. Livingston's Stone is now recognized by all as the greatest canning Tomato. We alone supply enough seed to the leading Tomato growers and canners every year to produce millions of plants. Order direct from us to get seed of our growing. Pkts., 5c. and 10c.; ½ oz., 25c.; oz., 45c.; ¼ lb., \$1.40; lb., \$5.00.

Livingston's Beauty

The greatest of all Purple-Colored Home Market Sorts. Strong Grower, Very Productive. Large, Smooth and Early. (Introduced by Us in 1886.) Although introduced by us so many years ago, this is still one of the most popular purple-colored Tomatoes. The plants make a strong growth, are hardy and bear plentifully. The fruit is produced in clusters of 4 to 6, is large, of perfect shape, and retains its size until late in the season. It ripens early, has firm flesh of excellent quality, and the seed cells are very small. For home market it is excellent. May be picked quite green; will ripen up nicely, look well and keep in perfect condition for several days. Pkts., 5c. and 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.50.

Livingston's Beauty

Livingston's Royal Red

Livingston's Royal Red

(Introduced by Us in 1892.) A grand Tomato, and worthy of a prominent position alongside of its renowned predecessors already bearing the "Livingston" name. A first-class main crop variety. Fruit of a beautiful red color and handsome appearance. A desirable tomato for canning and catsup making. Pkts., 5c. and 10c.; ½ oz., 20c.; oz., 35c.; ¼ lb., \$1.25; lb., \$4.50.

Livingston's Paragon

(Introduced by Us in 1870.) This was the first perfectly smooth, deep red Tomato ever offered to the American people. We have endeavored to keep it up to the original high standard, and there are many gardeners and catsup-makers who today, after 40 years, would not have any other kind for a main cropper. It is an immense yielder. In time of ripening, a medium early. The fruits are of large size and remain so throughout the season. Flesh is solid, of superior quality and of appetizing appearance. Pkts., 5c. and 10c.; ½ oz., 25c.; oz., 45c.; ¼ lb., \$1.40; lb., \$5.00.

Livingston's Perfection

(Introduced by Us in 1880.) Livingston's Perfection may fittingly be described as an improved Acme with red skin. Skin is tough, fruits remarkably solid; hence a good shipper. It is a medium sized, smooth, bright-red sort of excellent quality. It ripens earlier than Stone, keeps its good size to the end of the season and is excellent for either market or home use. Used in northern sections for canning because early. Pkts., 5c. and 10c.; ½ oz., 20c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

Livingston's Hummer

Originated by Us and Introduced in 1907

Is round as a ball, smooth as an apple, a good variety for forcing, very prolific, and has very little indenture about the stem end. The color of the fruit is very attractive bright scarlet. The flesh is a rich crimson scarlet, and of the very best quality. In size an excellent variety for canner's use, as a large percentage of the fruits can be put into the can whole; quite early; desirable in latitudes where the crop must be produced in a short time.

It is hard to beat for market and home garden. It is a healthy, vigorous grower of medium-sized vines. The fruit itself is solid. Pkts., 5c. and 10c.; ½ oz., 20c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

A Kruhman, Long Island, writes Sept. 7, 1917: "Livingston's Globe is truly a wonder! On poor soil (a loamy top soil underlaid with 4 inches of clay and beneath that ten feet of gravel resting on top of the broad Atlantic) Livingston's Globe has out-yielded every other sort of consequence and I am growing the ten best. Livingston's Globe surpasses in size of fruit, solidity, smoothness of skin and number of fruits to the plant every other sort in my garden is a disease resisting as any, has stood terrific heat without injury and is a wonder for enduring long dry spells without shedding blossoms. Only two other kinds compare with it in this respect and these happen to be Livingston's Stone and Livingston's Magnus."

Livingston's Favorite

(Introduced by Us in 1883.) Livingston's Favorite will always be that which its name implies—a Favorite with canners and in the home garden. Favorite is one of the best shaped, large, bright red Tomatoes. The fruit ripens evenly, is always smooth, and holds its size to the end of the season. Flesh is of good flavor, very solid. Pkts., 5c. and 10c.; ½ oz., 25c.; oz., 45c.; ¼ lb., \$1.40; lb., \$5.00.

Livingston's Acme

(Introduced by Us in 1875.) As a shipping sort for growing in Southern States it is one of the best. This was the first perfectly smooth, large purple Tomato introduced. Today, after thirty-five years, it is still the leading sort with extensive growers in the South, particularly in Texas. It is a smooth, uniform, medium-sized, early, purple-fruited sort, very prolific. Fruits in clusters of four or five, are of medium size and free from cracks; are solid and stand long-distance shipment; quality fine. Pkts., 5c. and 10c.; ½ oz., 20c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

Livingston's Honor Bright

(Introduced by Us in 1897.) The distinctive features of this sort are its solidity, long-keeping qualities after being picked and the remarkable changes of color the fruit undergoes during growth and ripening. First it is light green, then an attractive waxy-white, then lemon-yellow, finally changing to a rich red. It can be shipped in crates like apples, if picked when in the yellow stage of ripening. Fruits ripen very evenly. Flesh is tender and melting. Pkts., 5c. and 10c.; ½ oz., 20c.; oz., 30c.; ¼ lb., \$1.00; lb., \$3.50.

Livingston's Golden Queen

(Introduced by Us in 1882.) "Queen of all the Yellows." Of superior flavor, it is solid, always smooth, entirely free from ridges, large in size, ripens early. Fine for slicing. Pkts., 5c. and 10c.; ½ oz., 20c.; oz., 35c.

Livingston's Gold Ball

(Introduced by Us in 1892.) Beautiful canary-yellow; flesh thick, fine quality; handsome color; very productive. Pkts., 5c. and 10c.; ½ oz., 15c.; oz., 25c.

Livingston's Hummer

Livingston's Buckeye State

(Introduced by us in 1893)—The largest Tomato bearing our name. The extra large fruits are borne in clusters of three to six. Buckeye State has a smooth skin of dark purple color. The fruit is very meaty, solid, and the flesh is of most desirable quality. The principal objection to "mammoth" sorts has been their rough and uneven skin. In Livingston's Buckeye State we have been successful in eliminating these weak points, and planters everywhere will appreciate the beautiful large fruits, which are exceedingly showy and find a ready sale. Pkt., 5c. and 10c.; $\frac{1}{2}$ oz., 30c.; oz., 50c.; $\frac{1}{4}$ lb., \$1.50; lb., \$5.50.

Livingston's Improved Dwarf Champion

Bears fruit fully one-third larger than the original Dwarf Champion in all kinds of soils. Fruit is produced in clusters of three to five. Of a beautiful glossy purple; firm, solid, thick flesh, with large meaty center. Pkts., 5c. and 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Livingston's Dwarf Stone

(Introduced by Us in 1902)

The advent of Dwarf Stone marked a new epoch in Dwarf Tomatoes. The fruits are larger than those of Dwarf Champion and nearly as large as those of our Standard Stone.

It is very prolific. Fruit smooth; ripens evenly. The color is bright red. You may set the plants of Livingston's Dwarf Stone as close as 18x24 inches and still produce an abundant crop. Pkts., 5c. and 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25.

Livingston's Dwarf Purple

(Introduced by Us in 1903)

Large fruited Dwarf-growing purple Tomato. Smooth and not liable to crack. Flesh solid and thick, with few seeds. Pkt., 5c. and 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Livingston's Dwarf Aristocrat

(Introduced by Us in 1893)

This Tomato in habit of growth and foliage resembles the Dwarf Champion, but the color is a beautiful rich, glossy red. The size, solidity, productiveness, smoothness, flavor of its fruit are all that are to be desired. Pkt., 5c. and 10c.; $\frac{1}{2}$ oz., 20c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Livingston's Dwarf Yellow Prince

(Introduced by Us in 1898)

A very choice Dwarf-growing yellow Tomato. Very early. Flesh is solid and the flavor is desirable. Of large size and beautiful shape. When sliced with red or purple sorts it is highly ornamental. Pkts., 5c. and 10c.; $\frac{1}{2}$ oz., 20c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Livingston's Magnus

Livingston's Coreless

Livingston's Coreless

(Originated by Us and Introduced in 1908)

▲ Perfect Shaped Canning Variety of Large Size, Globe Shaped, Full at Stem End; Bright Red, a Strong Grower and a Big Cropper.

All markets requiring a bright-red sort will be pleased with Livingston's Coreless. In shape it is almost round, being of about the same diameter each way. The depression at the stem end has been almost eliminated, making a profitable variety for canning owing to a very small amount of loss in material and labor. Is immensely productive, clusters of 4 to 7 fruits are produced at six to eight inches apart along the stem. All of the fruits are of marketable size, and many of them are quite large, twelve to fifteen ounces. A grand, good slicing variety, the seed cells being surrounded by bright-red, heavy, meaty and delicious flesh. Its color is that bright, rich red so desirable in a canning sort. Pkts., 5c. and 10c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Livingston's Magnus

One of the Finest for Growing on Stakes

(Introduced by Us in 1900.) This distinct variety, of the color of Livingston's Beauty, is one of the most valuable additions to the Tomato family. It is large, early, thick, heavy and solid, and one of the most handsome varieties in cultivation. Livingston's Magnus is unsurpassed in quality and in the production of fine, large fruits. While well adapted to main-crop planting, it also takes first rank for early market purposes. The form is perfect, uniform, large and attractive; quite deep through from stem to blossom end. The flesh is very firm. A robust grower, with short joints, setting its clusters closer together than most varieties, and is a very heavy cropper. It has the broad foliage which prevents sunburn in hot sections. Ripens evenly, does not crack about the stem. For staking up in the open field, as well as for forcing in greenhouses, is fully equal to any for such purposes. Pkts., 5c. and 10c.; $\frac{1}{2}$ oz., 20c.; oz., 30c.; $\frac{1}{4}$ lb., \$1.00; lb., \$3.50.

Mr. T. M. Christie, Clinton County, Pennsylvania, writes under date of June 9th, concerning Tomato Seed, as follows: "I have grown your fine Tomatoes for several years and often have been greeted with 'You have the best tomatoes on market.' Your Beauty and Globe are the principal brands. I now have Manyfold growing nicely in addition to the others."

Other Selected Varieties of Standard Tomatoes

For years we have aimed to give all the new varieties of Tomatoes offered a thorough test for quality and comparative points in our True Blue Trial Grounds, near this city, which are under the personal supervision of a most efficient manager, who devotes his best energies to the testing of all the seeds we sell; both for purity of stocks and also to determine that all seeds sent out by us shall be absolutely of the highest percentage of germination. By this plan we not only keep abreast of the times on the Tomato question, but posted on all varieties of both Flower and Vegetable Seeds, especially all novelties, and are therefore placed in a position to offer those deserving of introduction as fast as brought out by any grower or dealer in the horticultural world. Our limited space in this department of our catalogue will not admit of very full or extended descriptions of the fine Tomatoes offered below. The seed stock we offer we can recommend to be as fine as any offered by our competitors or the original introducers.

Earliana

Earliana

The earliest smooth, bright-red Tomato of good size. It has been developed in the light, warm soil of Southern New Jersey, where effort is made to market Tomatoes at the earliest possible date. It is so far superior in hardiness, sure-setting of fruits, size and smooth uniform shape, now practically controls the markets of our Eastern cities during the last week of June and the month of July. The plants are compact in growth, with short, close-jointed branches, setting fruits very freely. With the Livingston strain the Tomatoes are quite uniform in size and of smooth, regular form, averaging three inches in diameter and from two to two and a half inches in depth; they are fleshy, solid and excellent for shipping purposes.

Our stock of Earliana was almost a failure this season, but we were fortunate in securing some stock from a reliable grower and believe it will be found satisfactory. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Chalk's Early Jewel

A little later than Earliana—a heavier cropper, larger size, fine flavor. Brightest scarlet; ripens up to stem without green core. Flesh thick, bright scarlet, solid, sweet flavor. One of the largest cropping, medium early varieties we grow. Comes in ahead of Livingston's Stone, almost as large. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.50.

Red Rock

Quite similar to Livingston's Stone, in fact we fail to see any reason for its introduction as it does not have a single point of superiority and has failed to come into bearing any earlier, as was claimed by the introducers. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.

Mrs. E. M. Pirkey, Shawnee Co., Kans., writes January 28, 1917: "I want to tell you of the most excellent Tomatoes grown from your seed last year. We had the Stone and Beauty and found them both fine in quality and bearing, but the Stone is especially fine for a long season and for canning. We had Tomatoes every day from about July 20th to November 20th, and sent several baskets to friends out in New Mexico, camping in the mountains. I have never enjoyed Tomatoes so much in my life as these were last season."

T. M. Anderson, Knox County, Ky., writes January 2, 1917: "The Beauty Tomatoes which were raised from seed purchased from you last year took first prize at the Pulaski Co. Fair. I raised Globes measuring six inches in diameter, sufficient for two meals for one person."

June Pink

A Pink Earliana

Ripens as early as Earliana. It is an enormous bearer, clusters of six to eight fruits, being borne close to the main stem. A large percentage of the fruit being produced very early. The fruit is of medium size, uniform, smooth and attractively shaped. Excellent for shipping. In color it is a bright, pleasing pink, and in markets where a pink Tomato is desired, it is a great seller. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Comet Forcing

Superior red variety for forcing under glass. Rich scarlet-red; fruits are solid, round, smooth; strong grower; exceedingly heavy cropper; medium-sized fruits; flavor excellent. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Chalk's Early Jewel

Matchless Tomato

A fine, smooth main crop Tomato, of rich cardinal red color, with solid flesh of finest quality. Grows to good size which it maintains throughout the season. Very similar to Livingston's Stone. Pkt., 5c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.; $\frac{1}{4}$ lb., \$1.35; lb., \$4.75.

Trucker's Favorite

A purple fruited sort of excellent quality, highly esteemed in many Eastern and Southern markets. Grows to uniformly large size which is maintained until late Fall. Fruits are invariably smooth, solid and the flesh is of finest color throughout. Unexcelled for slicing or cooking. Plants are very thrifty and bear continually until killed by frost. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.50.

Dwarf Giant

A new dwarf sort of good size and very prolific, producing fruits in clusters around the base of the plant. Tomatoes are smooth and of regular size and shape. Of the same color as Ponderosa—the originator calls it a "Dwarf Ponderosa." Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 45c.; $\frac{1}{4}$ lb., \$1.40; lb., \$5.00.

Ponderosa

The largest variety of practical value. The fruits ripens early and bears well until very late; very solid, almost seedless, of good sub-acid flavor and of immense size, frequently weighing considerably more than 2 pounds. Somewhat scattered on the vine, and a small percentage are rather rough. Our strain, however, is now producing a much smoother fruit than when first introduced. Good Tomato for home use; splendid slicer. Pkt., 5c and 10c.; $\frac{1}{2}$ oz., 35c.; oz., 60c.

Bonny Best

Best Red for Greenhouses

One of the finest bright red sorts for growing in greenhouses, and a good one to follow Earliana in the open field. It has been highly recommended by U. S. Dept. of Agriculture as well as big growers and shippers throughout the country. Bonny Best is a favorite Tomato of medium size. They are of bright scarlet color, always smooth and of remarkably uniform size and shape. A splendid sort for market and shipping. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.50.

Ponderosa (Two-thirds Natural Size)

Bonny Best

Early Detroit

A very productive, early purple sort, uniform in size of fruit, free from cracks, and does not blight easily. Fruit large and smooth. Vines vigorous and quite productive. Quality excellent. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.; $\frac{1}{4}$ lb., \$1.25; lb., \$4.50.

Small Fruited Tomatoes

Excellent for Preserves, Pickles and Pies

Red Currant—Smallest of all sorts. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.

Red Pear-Shape—Pkt., 5c.; $\frac{1}{2}$ oz., 20c.

Yellow Cherry—Pkt., 5c.; $\frac{1}{2}$ oz., 20c.

Red Cherry—Pkt., 5c.; $\frac{1}{2}$ oz., 20c.

Yellow Plum—The finest of the small varieties. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.

Yellow Pear-Shape—Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.

Mixed Small Tomatoes—Above 6 sorts. Pkt., 10c.

Yellow Plum

Odd Tomatoes

Purple Peach—Resembles some peaches so closely in size, shape and general appearance that at a short distance away it could be taken for a peach. Color purple, blended with orange-amber; very productive. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.

Yellow Peach—Like Purple Peach, except in color; a rich golden yellow. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.

Strawberry (Winter Cherry, or Husk Tomato)—This delicate husk-enveloped Tomato is unequalled for making preserves and pies. Have a strawberry flavor and are very productive. For varieties of this class see below.

Golden Husk—Fruit a handsome golden color, the size of large cherries. Best sort. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.

Purple Husk—Beautiful; very productive. More acid than Golden Husk. 1 to 2 inches in diameter. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.; oz., 35c.

Livingston's Recleaned Farm Seeds

Grass, Clover, Alfalfa, Soy Beans, Cow Peas, Vetch, Rape, Field Corn, Oats
Potatoes, and Many Other Important Seeds

These are all selected with reference to quality and especially to adaptability for Central United States

TO our old friends and those acquainted with our methods it is perhaps not necessary to call attention to these points. But to those who are looking for a new source of supply and to those who are not acquainted with us, we would call attention to a few points that we consider important and should be of interest to all who are in need of any kind of seed whether Garden or Farm sorts.

First, and foremost, in place of being mere seed merchants, we are practical Seedsmen and have been for three generations and have been in a manner born and reared on the garden and farm. We were there taught methods and manner of preparing, fertilizing, cultivation and curing, and still more important, acquired a keen sense of discrimination, a trained eye for selection and plant variation, all of which are valuable in judging and determining on varieties of merit to both farmer and gardener.

Second—Situated as we are in almost the exact center of the State and midway between the seaboard on the East and the Mississippi River on the West, right in the midst of the greatest grain growing section in the United States, if not the greatest in the world, where all cultivated crops are unsurpassed and where entire failure has never been known, we are, under normal conditions, almost assured of never meeting with entire failure.

Third—Our shipping facilities are unsurpassed, having seventeen steam railroads and eleven electric railways operating out of Columbus, radiating from this center like the spokes of a wheel, thus giving us direct connection with all the great trunk line railroads North, South, East and West, and putting us within 18 hours of practically all points within a 500 mile radius or in touch with 65,000,000 people, or over half of the population of the United States.

In addition to our unsurpassed railroad facilities we have all the large Express companies and all the main telegraph lines and occupy a strategic position as to long distance telephones.

Fourth—The great trunk lines of commerce under which we are located along with the Parcel Post service places us in a position to get in touch with more people and place goods in their hands in a shorter length of time than any city in the Central Middle West. These points of advantage are of great value to both merchant and customer.

Fifth—With our experience and accumulated knowledge which reaches back to 1850, our acquaintance with source of supply for such seed stocks as we do not grow ourselves, our unsurpassed shipping facilities by freight, Express or Parcel Post, our location and this backed by the best soil in the world and our knowledge of the practical side of the seed business and with a corps of competent practical gardeners and farmers that we have as our assistants in handling the growing crops, selecting and curing of same, and all backed with a disposition to serve you to the best that can be had and in the shortest possible length of time, we feel that we occupy a position that should have your careful and thoughtful consideration and entitle us to your confidence and your orders, which if given shall have our best attention and assure you our best efforts shall always be at your service.

We positively refuse to handle the low quality and worthless grades of seed, and if possible, we secure first quality, that is the grade we consider the cheapest in the end but of course will cost a little more in the beginning.

We have established our reputation for quality and service by constantly keeping before us our customers interest and the motto "Quality First."

BIGGER CROPS BETTER SOIL

Mulford Cultures

FOR LEGUMES

Small Cost
Easy to Use

Large Returns
No Labor Expense

Uninoculated

Inoculated

THE CONTRAST SPEAKS FOR ITSELF

Gets results on other crops the same as Soy Beans. Try it out this year on your peas, beans, clovers, etc.—the result will astonish you—the cost is small—the results great. It is better farming.

STARTS THE YOUNG PEAS, BEANS, ALFALFA, CLOVER, ETC., WITH A RAPID, VIGOROUS GROWTH

Of course you want bigger crops and better soil. Progressive farmers everywhere are getting bigger crops and making their soil more productive by using Mulford's Cultures.

It costs less than commercial fertilizer. It gives quick action on the crops for which it is prepared in the same way that "mother" supplied to cider, quickly converts it into vinegar. It enables the plant to take nitrogen (an expensive important plant food) from the air and store it in the soil.

The U. S. Department of Agriculture recommends inoculating legumes to induce a prompt "catch" and increased yield.

Mulford Cultures are prepared with the same care and by the same company that make Diphtheria antitoxin, Smallpox vaccine, Hog Cholera Serum, etc. It is absolutely reliable and gives best results possible.

Try it on your next planting—the cost is small; the returns large. Plant part of the seed without inoculation and note the difference.

Easy to Use: No special tools required—mix with the seed and plant as usual. Cannot injure the seed or land.

Be sure to state on your order what crop you want to use it on, as there is a different strain of bacteria for each legume.

Mulford Cultures are prepared for:

Alfalfa	Alsike Clover	Vetch	Lima Beans
(Lucerne)	Burr Clover	Velvet Beans	Lespedeza
Crimson Clover	Cow Peas	Sweet Peas	Beggar Weed and
Sweet Clover	Soy Beans	Garden Peas	Others
Red Clover	Peanuts	Garden Beans	

PRICES

Garden size (supplied only for Garden Peas, Garden Beans, Lima Beans and Sweet Peas; no others in this size. For which one of these do you want?).....	\$.30
1/4 acre size (For which crop do you want it?).....	.50
1 acre size (For which crop do you want it?).....	1.50
5 acre size (For which crop do you want it?).....	5.00

These prices include delivery.

Don't forget to state on your order which of the above crops you want it for. Not prepared for wheat, corn, oats, etc.

FREE DESCRIPTIVE LITERATURE SENT UPON REQUEST

To Insure Success With Legumes

Such as Alfalfa, all Clovers, Peas, Beans, Vetches, Cowpeas, Soybeans, etc.

---Treat Your Seed With---

CARRIES NO
WEEDS
INSURES
THE SEED

The Improved Soil Inoculator, Nobbe-Hiltner Process

NITRAGIN

TRADE MARK REG. D. L. C. G. 1898 NO. 32 217

Restores and Maintains Soil Fertility

ENRICHES THE
SOIL
INCREASES
THE YIELD

For legumes should enrich your soil besides giving a big crop. They will only do this if they take food from the air and this is only possible when their partners—the nitrogen-gathering bacteria are in the roots.

The best way to supply these bacteria is by the pure culture method. "NITRAGIN" is a pure culture of just

the right kind of these bacteria, carefully bred up to great inoculating power. The bacteria are packed in the modern scientific way—the granular medium and ventilated can. It is guaranteed for six months and will keep longer.

We are listing "NITRAGIN" because it is perfectly uniform and reliable and has given great satisfaction to its users. The price is reasonable.

Garden size (Good for either Peas, Beans or Sweet Peas; no others in this size).....	\$.35
1/4 acre size (For which crop do you want it?).....	.60
1 acre size (For which crop do you want it?).....	1.00
5 acre size (For which crop do you want it?).....	4.00
10 acre size (For which crop do you want it?).....	7.50

These prices include delivery.

Prepared for same crops as Mulford's Cultures. (See above.)

Livingston's Re-Cleaned Grass and Clover Seeds

Our Grass and Clover Seeds are selected with special reference to their quality. Purchasers may rely upon our best exertions to furnish them with these vitally important qualities—fresh, pure and free from noxious weeds and foreign seeds.

Prices on Grass and Clover Seeds are changing almost daily. **AND WE CAN ONLY GIVE PRICES SUBJECT TO FLUCTUATIONS.** No charge for bags at prices quoted below; do not forget this important item when comparing our prices with others. Pound prices are postpaid. In larger quantities by Parcel Post, Express or Freight, purchaser pays the freight. See page 3 for Parcel Post Rates. Owing to the European War, prices on imported seeds are more unsettled than usual. If interested in imported Grass Seeds or for larger quantities, write for special rates.

Best Grasses

Awnless Brome Grass (*Bromus inermis*)—Will stand long droughts and still produce heavy crops in dry sections where other grasses would surely perish. Has also proven itself one of the hardiest grasses. Especially desirable for permanent pastures. Succeeds in a wider range of temperature than any other grass. Sow from 25 to 30 lbs. per acre. (Bu., 14 lbs.) Lb., 60c., postpaid; 10 lbs., \$4.50; 100 lbs., \$40.00.

Kentucky Blue Grass

(*Poa Pratensis*)—Also called **June Grass**. This famous grass is well known in all sections and where the land is suitable is one of the most profitable of all for pasture. It generally grows well on any stiff or loamy soils in Central and Northern States where rich, moist though moderately well-drained, and succeeds fairly well in some sections of the South where lime is present in the soil. Kentucky Blue Grass is at its best in the Spring and Fall months. It grows very slowly at the start, but when once established forms a close, compact turf, making a fine pasture, and is most excellent for lawns. It is sown at the rate of 1 to 2 bushels for pasture and 4 to 5 bushels for lawn purposes per acre. Price—Lb., 55c., postpaid; 10 lbs., \$3.75; 100 lbs., \$30.00.

Creeping Bent Grass (*Agrostis stolonifera*)—Excellent for pasture when mixed with other grasses. Succeeds well in most sections and thrives in moist land. Sow 40 lbs. per acre. (Bu., 14 bu.) Lb., 95c., postpaid; 10 lbs., \$8.00; 100 lbs., \$75.00.

Crested Dog's Tail (*Cynosurus cristatus*)—May be sown on lawns; forms a close turf, remaining green for a long time; valuable for sheep pasture; succeeds on dry, hard, and gravelly soil. Height 1 to 1½ feet. Sow 25 lbs. per acre. (Bu., 21 lbs.) Lb., 50c., postpaid; 10 lbs., \$3.75; 100 lbs., \$30.00.

Hard Fescue (*Festuca duriuscula*)—Not very productive, but is of very fine quality; thrives in dry situations where many other grasses would fail, thus making it desirable for pasture. Sow 30 lbs. per acre. (Bu., 12 lbs.) Lb., 55c., postpaid; 10 lbs., \$4.50; 100 lbs., \$40.00.

Meadow Fescue (*Festuca pratensis*)—Thrives in all soils; excellent for permanent pastures; starts early; productive. Sow 25 to 35 lbs. per acre. (Bu., 24 lbs.) Lb., 45c., postpaid; 10 lbs., \$3.00; 100 lbs., \$28.00.

Blue Grass

Orchard Grass (*Dactylis glomerata*)—Extremely hardy and widely known. One of the earliest to start in the Spring; grows rapidly; furnishes an abundance of pasture the entire season. Sow 20 to 30 lbs. per acre. (Bu., 14 lbs.) Lb., 50c., postpaid; 10 lbs., \$3.75; 100 lbs., \$30.00.

Rhode Island Bent Grass (*Agrostis canina*)—Valuable for lawns. Sow 35 to 50 lbs. per acre for lawns, 20 to 30 lbs. for pasture. (Bu., 12 lbs.) Lb., 65c., postpaid; 10 lbs., \$5.00; 100 lbs., \$45.00.

Sheep Fescue (*Festuca ovina*)—Grows naturally on light, dry, sandy soils and mountain pastures; considered valuable mixed with other grasses for permanent early Spring pasture. Sow 15 lbs. per acre. (Bu., about 12 lbs.) Lb., 75c., postpaid; 10 lbs., \$6.00; 100 lbs., \$55.00.

Timothy (*Phelum pratense*)—As a crop to cut for hay, Timothy is probably surpassed by no other grass now cultivated. If sown alone it requires 8 to 12 pounds per acre. It is usually sown with other grasses about one-half to one-third of the above amount. Can be sown in either Fall or Spring. Timothy Seed is one of our specialties, we sell many car loads of seed annually, write us for latest prices, whether you want a bag or a carload. Sow 8 lbs. per acre. (Bu., 45 lbs.)

Prime Seed Lb., 35c., postpaid; 10 lbs., \$1.30; 100 lbs., \$10.50
Choice Seed Lb., 35c., postpaid; 10 lbs., \$1.35; 100 lbs., \$11.00

Timothy

Perennial Rye Grass (*Lolium perenne*)—Very nutritious; valuable for meadows or permanent pastures; rapid grower. Sow 25 to 35 lbs. per acre. (Bu., 24 lbs.) Lb., 30c., postpaid; 10 lbs., \$1.40; 100 lbs., \$10.50.

Wood Meadow Grass (*Poa nemoralis*)—Adapted for pasture or pleasure grounds; of early growth; thrives under trees. Sow 25 to 30 lbs. per acre. (Bu., 14 lbs.) Lb., 95c., postpaid; 10 lbs., \$8.00; 100 lbs., \$75.00.

Tall Meadow Oat Grass (*Avena elatior*)—Used for soil-ing. Succeeds well in sandy lands, and owing to its long fibrous roots, stands cold and drought well. Sow 25 to 30 lbs. per acre. (Bu., 10 lbs.) Lb., 45c., postpaid; 10 lbs., \$3.00; 100 lbs., \$22.50.

Red Top Grass (*Agrostis Vulgaris*)—A well known variety. Particularly well suited to low and wet situations, but will do well on all classes of soil. Affords splendid pasturage and a fair crop of hay, ripens about with timothy, forms a firm sod and is a valuable grass for lawns and on lands subject to overflow and wash. (Bu., 14 lbs.) Fancy clean seed, lb., 30c., postpaid; 10 lbs., \$1.95; 100 lbs., \$19.00.

Red Top Grass (*Agrostis vulgaris*)

Livingston's Lawn Grass Seed AND SPECIAL MIXTURE

"Quick Grower" Lawn Seed

This mixture is prepared with special care for large grounds where it is desirable to get quick results and where extra fine quality is not so important, yet it makes a good, lasting lawn. If you have tried other mixtures and failed, give this a fair trial and we feel sure you will be pleased with the results.

Price—Lb., 55c.; 3 lbs., \$1.50, postpaid. 5 lbs., \$2.00; 10 lbs., \$2.75; 25 lbs., \$8.75; 100 lbs., \$30.00; 500 lbs., \$125.00.

Livingston's Capitol Lawn Seed

Is the seed to sow for a perfect and enduring luxuriant rich green growth throughout the year. Price—Lb., 55c.; 3 lbs., \$1.50, postpaid. 5 lbs., \$2.00; 10 lbs., \$3.75; 25 lbs., \$8.75; 100 lbs., \$30.00; 500 lbs., \$125.00.

Shady Place Mixture

On nearly all lawns there are shaded, bare and unsightly spots on which the owners have difficulty in getting a stand of grass. For such places this mixture is adapted. It is composed of grasses which naturally grow in shaded places. Price—Lb., 75c.; 3 lbs., \$2.10, postpaid. 5 lbs., \$3.25; 10 lbs., \$6.25; 25 lbs., \$15.00.

Tennis Court Mixture

A mixture composed of low-growing hardy grasses suitable for grounds of this kind. Price—Lb., 75c.; 3 lbs., \$2.10, postpaid. 5 lbs., \$3.25; 10 lbs., \$6.25; 25 lbs., \$15.00.

Kentucky Blue Grass

Many prefer plain Blue Grass to a mixture, and it can not be denied that it produces a beautiful and lasting lawn. It takes longer, however, to get established. Price (fancy clean seed)—Lb., 55c.; 3 lbs., \$1.50, postpaid. 5 lbs., \$2.00; 10 lbs., \$3.75; 25 lbs., \$8.75; 100 lbs., \$30.00; 500 lbs., \$125.00.

Golf Link Mixture

We are prepared to make mixtures suitable for golf links. Give us your condition with area to be covered and ask for prices.

See third page of cover for directions for making a lawn and amount of seed to use and fuller instructions.

Mixed Grasses

For Meadows and Permanent Pastures—We are prepared to furnish seeds adapted to all soils, all situations and all purposes—for light, medium, and heavy soils. By light soils we mean that which is more or less of a sandy or gravelly nature; the heavy, clay and heavy loams, while the medium is an intermediate between these two. A light, wet soil, with respect to grasses suited to it, may be considered same as too heavy soils; a dry, heavy soil more as the light soils. Write us what you want, giving nature of soil, number of acres, etc., and we will, with pleasure, give you estimate and terms.

All Prices Subject to Market Changes

Livingston's Re-Cleaned Clover Seeds

Parties wishing large quantities will do well to get samples and prices before placing their orders. We handle it on a close margin and supply the finest grades. It is impossible to tell how low our prices are without seeing samples, which will be sent free on application. A bushel of Clover Seed is 60 pounds. Pound prices are postpaid, in larger quantities purchaser pays the transportation charges. For Parcel Post rate see Page 3.

Sweet Clover, or Bokhara

Melilotus Alba (White), *Melilotus Officinalis* (Yellow) are Biennial; *Melilotus Indica* (Yellow), Annual.

Are the varieties in general use. The white-flowered variety (*Melilotus Alba*) is the one we handle unless otherwise mentioned. It is the strongest grower and by far the best.

When young it resembles Alfalfa, but when mature it often stands 5 to 8 feet high and blooms from June to October. The roots of all varieties are large and much branched and penetrate the ground several feet. Being a Biennial, all top and roots die at the end of the second year if the plant ripens seed.

If cut before seed is ripe, or if pastured so that seed is not matured, the plants lasts over several seasons.

Is found growing under very varied conditions of both soil and climate. It, however, prefers a limestone soil and has been largely used to reclaim old, worn-out, abandoned lands. It is of great value for this purpose.

Apart from its value as a nitrogen gatherer and humus producer, Sweet Clover is rapidly coming to the front as a hay and pasture crop. Its feed value is nearly equal that of Alfalfa, and in a short time stock eat it as readily as they do Red Clover and seem to thrive on it equally well. For hay cut just before it comes into bloom, and is handled as you would Alfalfa. It is also used extensively as a Bee pasture, the small white blooms yield much fine honey.

Sow clean hulled seed at the rate of 15 to 20 lbs. per acre, from April to Sept. 15th, with or without a nurse crop.

Price: Lb., 45c.; 10 lbs., \$3.50; 25 lbs., \$8.50; 50 lbs., \$14.50; 100 lbs., \$28.00.

Alsike or Swedish

Alsike, or Hybrid (Swedish)

Hardest of all clovers. On rich, moist soil, yields large quantities of hay or pasture. Will thrive in soils which are so wet that the common Red Clover would not live. Unlike some of the other clover, which have tap roots, Alsike has many fibrous roots, hence is not injured by freezing and thawing of the ground. Esteemed highly by beekeepers. Sow 5 lbs. per acre. Lb., 45c.; 10 lbs., \$3.50; 50 lbs., \$14.50; 100 lbs., \$28.00.

On Jan. 27, 1917, Mrs. J. B. Galbraith of Davis Co., writes as follows: "I will surely say a good word for your seeds, whenever I can. They are just fine, just as recommended. You will receive my order in about two weeks."

Prices Subject to Market Change

Sweet Clover

Alfalfa or Lucerne (*Medicago sativa*)

The Greatest Feed on Earth

Alfalfa is being more generally grown as experience is teaching our farmers the proper methods to follow. Different soils do not now seem so difficult to overcome, especially where they can be properly drained, pulverized, sweetened and inoculated.

Alfalfa does not thrive on acid or sour land, nor will it do its best without inoculation on any kind of soil.

Treat your land to a liberal dressing of fine ground lime or more liberally to fine ground limestone well worked into the soil some three months to a year before seeding to Alfalfa.

Sow from 10 to 15 lbs. well inoculated seed per acre, using Nitragin. From April 1st to June 15th for the early Spring sowing, either drilled or sown broadcast. If broadcast cover lightly with a light drag or with single stroke of a harrow.

Much seeding is now done later and many prefer sowing from July 15th to September 15th. When seeded late it gives the grower an opportunity to have his land clean and free from weeds.

Alfalfa naturally prefers a deep, sandy or garvelly sub-soil. Roots from 3 to 15 feet deep, and a good stand on properly selected land should yield from 3 to 5 cuttings a year. We make a specialty of extra high grade seed that tests 99 per cent, pure or better. Get our samples and prices before ordering. Prices: Lb., 35c.; 10 lbs., \$3.00; 100 lbs., \$24.00.

Medium, or Common Red—The most important and valuable of the Clover family. Makes the best of hay. Sow 10 lbs. per acre. Lb., 55c., postpaid; 10 lbs., \$4.00; 100 lbs., \$35.00.

Mammoth Clover—Valuable with other grasses for mixed hay. Ripens about with Timothy. Being a rank grower, it is used largely for plowing under. Sow 10 lbs. per acre. Lb., 55c., postpaid; 10 lbs., \$4.00; 100 lbs., \$35.00.

Crimson Clover—Should be sown in July, August and September of each year. Can be sown with corn, or any cultivated crop. Sow 10 to 15 lbs. per acre. Cover lightly. Use only American grown seed. The Spring following it can be cut for soiling May 1st; for ensilage, May 1 to 15; for seed about third week in June. Lb., 50c., postpaid; 10 lb., \$2.50; 100 lbs., \$22.00.

White Dutch Clover—Good in permanent pastures, especially for cattle; valuable for bees, and the best variety for lawns. Sow in Spring at the rate of 5 lbs. per acre when sown alone; $\frac{1}{2}$ the quantity when sown with other grasses. Lb., 75c., postpaid; 10 lbs., \$6.00; 100 lbs., \$58.00.

All Prices Subject to Market Change

Alfalfa Plant

Alfalfa Field

Miscellaneous Farm Seeds

Our grades of Farm Seeds are away above the average quality, and this makes a big difference in the value—the low, trashy grades being costly at any price—and yet our prices will be found very little, if any, above those quoted by others. The man in charge of this department, having been with us more than thirty years, is thoroughly posted and will take pleasure in giving customers any information desired. The prices quoted below are **Net Cash, free on cars** this city, purchaser paying all transportation charges, except when quoted postpaid. At the prices given here we make no charges for bags or cartage. The prices quoted are **subject to market fluctuations**. Should any article seem high or when customers are in need of large quantities, we will be pleased to submit samples and quote, on application, the lowest prices that the market will justify at the time. Please state quantities when writing for prices.

Prices on Farm Seeds are subject to important market changes. Ask for Samples and Prices before placing your order

Artichoke Roots

The Jerusalem Artichoke can be grown only from the tubers. It is especially valuable as a cheap and healthful hog food, and the hogs do the harvesting. Tubers—4 oz., 10c.; 1 lb., 30c., postpaid. By express or freight: Pk., 75c.; \$1.25; bu., (50 lbs.), \$2.00; bbl. of 3 bu., \$5.25. 3 to 5 bushels of tubers for an acre.

Cow, or Southern Peas

There is no surer or cheaper means of improving and increasing the productiveness of soils than by sowing Cow Peas. They put plenty of nitrogenous vegetable matter into the soil at a small cost. For hay they are most valuable. For ensilage they are unsurpassed. When it is desired to turn the entire crop under as a soil improver, it is better to do so after the vines are partly dead. A good picking of the dried peas can be made before plowing under. Cow Peas can be sowed in May or June, after the ground is warm, or about the close of the corn planting, at the rate of one-half to one bushel per acre. (60 lbs., to bushel.)

Black—Is quick to mature. Well adapted for Northern sections. A vigorous grower and a great yielder. Write for price.

Whip-Poor-Will

An early bunch-growing variety; a great favorite in the North and West; is quite prolific. Write for price.

Black-Eye—A prolific vine-growing variety of merit; seed often sold for table use. Write for price.

Market Price on Cow Peas changes often. Write for prices on larger quantities when ready to buy.

NOTICE—Owing to late season and short crop and unusual demand by the government, it is impossible to name price on Soy Beans and Cow Peas at time of going to press. Kindly write for price.

Sunflower

Mammoth Russian — Immense yielder—125 bushels of seed to the acre has been grown at less expense than corn. Very highly recommended for poultry. Best egg-producing food known. Good feed for horses as well. (See illustration.)
Choice Stock —
Oz., 5c.; ¼ lb., 10c.;
1 lb., 25c., postpaid.
10 lbs., \$1.35; 25 lbs., \$3.00; 100 lbs., \$11.00.

Mammoth Russian Sunflower

Buckwheat

Should be sown about the middle of June, using from 1 to 3 pecks of seed per acre. (50 lbs. to bushel.)

New Japanese—This new sort has proven to be much earlier and more productive than any other variety. Grains very large and of rich brown color. It excels all in yield and earliness. By express, not prepaid: Pk., 75c.; bu., \$2.75.

Silver Hull—A very good and popular variety. The grain is of light gray color, rounder than the common variety; has a much thinner hull. By express, not prepaid, pk., 75c.; bu., \$2.75.

Cow Pea Field

Soy Beans

The Soy Beans have attracted much attention in recent years on account of their great value as a feed, being much richer in protein than flaxseed, oilmeal, bran or oats, and can be used to balance a feed ration to good advantage; are worth for feed about \$1.50 a bushel when bran is worth \$20.00 to \$22.00 per ton; are used extensively in silage with corn, cane, etc. By its use the dairyman can make a combination that is wholesome, economical and a completely balanced food for milch cows. They also equal or surpass clover as a soil enricher, gathering nitrogen from the air; are used by fruit men as a cover crop with good results. May be used for silage, cover crop or feed in matured state.

Medium Early Green or Guelph Soy Bean

One of the oldest and best known sorts, which has become quite a favorite north of the Ohio river both for seed and forage crop. Grows 24 to 38 inches high; stems medium stout, $\frac{1}{4}$ to $\frac{3}{8}$ inch in diameter, branches often filling the space between 3-foot rows. The leaves very dark green, large and full in center, while the edges are freely curled. Pods of medium size, 1 to $1\frac{1}{2}$ inches long. Color of seeds, bright green. The branches are usually far enough above the ground to permit easy harvesting.

Write for price.

Itto San—This is one of the best for northern part of the state. It grows erect from 25 to 30 inches tall, branches are fine; leaves medium size; blossom purple; seeds medium sized, straw colored, orbicular in shape, distinguished by a brown spot beside the hilum or point of attachment to the pod. Matures in 100 to 115 days.

Write for price.

Ebony—Plant slender, not upright, much branched, leafy. Height 30 to 40 inches. Ripe about September 15th. Seeds rather small, flat and black. A good hay bean; not desirable for seed.

Write for price.

Mammoth Yellow—Latest maturing variety. Plants rather coarse, height 3 to 5 ft., ripens in 130 to 150 days. Good yielder, excellent to plow under as green manure.

Write for price.

Ohio Grown Stock—To be sown north of the Ohio River. Price same as **Early Green**. (60 lbs. per bushel.)

NOTICE—Owing to late season and short crop and unusual demand by the government, it is impossible to name price of Soy Beans and Cow Peas at time of going to press. Kindly write for price.

Lowest market prices on large or small quantities will be given on application as long as stocks last.

All prices subject to market change.

For **NITROCULTURE INOCULATOR**, see page 59.

Upper Illustration, Soy Bean Plant
Lower illustration, Soy Bean Field

Illustration of Plant and Field of Rape

Dwarf Essex Rape

Best Quick Growing Pasture for Sheep and Hogs.

There is but one variety of Rape that has proven profitable in the United States, and that is the Dwarf Essex Rape. No other plant known that will give so much pasture in so short a time at so little cost. Under favorable conditions it is ready for pasture in six weeks from time of sowing and can be sown any time from April to September at the rate of 3 to 5 lbs. per acre. Land should be prepared same as for Turnips. It is grown for pasture and green manuring and is especially valuable for these purposes. Rape-fed lambs should have free access to salt. One acre of good Rape will furnish feed for a flock of twelve sheep for 45 to 60 days. Our stock is the True Dwarf Essex, and not the worthless annual. Weight per bushel, 50 lbs. Price Packet, 5c.; 1 lb., 35c., postpaid. 10 lbs. \$2.00; 25 lbs., \$4.75; 50 lbs., \$9.50; 100 lbs. \$18.00. Write for prices on larger lots.

Broom Corn

Improved Evergreen—The best variety for general cultivation on account of the color and quality of brush. Ripens early, grows about 8 to 10 feet high; brush of good length, fine and straight, and always of green appearance when ripe. Our stock is select, having been saved by professional growers for their own planting. (46 lbs. to bushel.) $\frac{1}{4}$ lb., 15c.; 1 lb., 35c., postpaid. By express: 10 lbs., \$2.75; 25 lbs., \$6.50; 100 lbs., \$25.00.

From Philip Wise, Belmont County, Ohio.

January 29—"From the four bushel or New Victory Oats I got from you last spring, we sowed an acre and seven-eighths and we harvested 140 bushels or about that. I have lost exact figures, but they averaged over 70 bushels per acre, while our other Oats only yielded about 50 bushels. We expected to sow all our crop from New Victory Seed. We saved 112 bushels by themselves for seed, so they would not get mixed. The neighbors all fancied them both in field and bin."

All Prices Subject to Market Change

Sand or Hairy Vetch

One of the Newer Leguminous Plants of Value

(*Vicia Villosa*)—Since its introduction into this country this plant has made a splendid reputation for itself, especially as a crop to turn under. It succeeds on almost all soils, even poor sand soils produce quite good crops, though it is much more vigorous on good land. It is very hardy and remains green all Winter; it should be sown during August and September, and we advise that it be sown with rye—the rye helps to hold it up. It is much hardier than scarlet Clover and is giving excellent returns in the Northern and Northwestern states where the Winters are very severe and where many forage plants Winter kill. It is equally valuable in the South for a hay crop. Every gardener, dairyman and farmer should use this wonderful soiling plant.

Where conditions of soil, time of sowing, and rainfall have been favorable, it will make from 10 to 15 tons of green top to turn-under by the 1st to the 15th of May.

The root system is quite heavy and like all leguminous plants bear to a greater or less extent nitrogen gauls or nodules according to season, land and inoculation.

If the crop is to be used for hay, it will be well to sow 45 to 60 lbs. of Vetch, and with it $\frac{1}{2}$ bu. Rye per acre. Write for circular giving fuller culture directions.

If you want any considerable quantity, write for special quotations.

Vetch is largely grown in Europe, and on account of the war seed is scarce.

Price—Oz., 5c.; 4 ozs., 15c.; lb., 40c.; postpaid. By express or freight not paid: 10 lbs., \$2.80; 25 lbs., \$6.80; 50 lbs., \$12.00; 100 lbs., \$23.00.

Tree and Hedge Plant Seeds

Osage Orange—The best of all hedge plants. Oz., 10c.; $\frac{1}{4}$ lb., 30c., postpaid; 10 lbs., \$8.00; 25 lbs., \$18.00.

Catalpa (Speciosa)

A rapid grower and makes the best timber trees. Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 50c., postpaid.

Russian Mulberry

Easy grown; hardy; fine for hedges; makes fence posts in five years; fruit good. Pkt., 10c.; oz., 30c.; $\frac{1}{4}$ lb., 85c., postpaid.

Black Locust

A very rapid grower, as fence posts or ties may be cut in 10 years from planting seed, and will last a lifetime. Oz., 10c.; $\frac{1}{4}$ lb., 25c., postpaid; 10 lbs., \$7.00; 25 lbs., \$16.00; 50 lbs., \$30.00.

Spring Vetches

A good forage plant; also used for plowing under. Sow 50 to 75 lbs. to the acre broadcast, like wheat or barley.

Prices: Oz., 5c.; 4 ozs., 15c.; lb., 25c., postpaid. By express or freight not paid: 10 lbs., \$1.50; 25 lbs., \$3.25; 50 lbs., \$6.00; 100 lbs., \$11.00.

For NITROCULTURE INOCULATOR, See Page 59

Illustration Plant and Field Hairy Vetch

All Prices Subject to Market Change

Sudan Grass

(Andropogon Sorghum)

A New Forage Crop of Immense Value to the South and Middle West.

Sudan Grass was introduced into the United States in 1909 from Sudan under the name of Garawi. The result of this test by the Government proved so promising that it at once sprang into favor in the dry Middle West and South, and recommended for the Central States as a substitute for Millet in its use as a catch crop.

The dry region has no other satisfactory hay crop and Sudan Grass will be of great value there, as it has all the good qualities of Johnson Grass, but does not have the creeping root-stalks which are so objectionable.

Sudan Grass is strictly an annual and dies each year like Millet. This makes it fit into any system of rotation.

Sudan Grass grows 5 to 9 feet tall. The stems are very small, rarely thicker than a lead pencil.

The plant stools freely when given plenty of room, and often produces 100 stems from one crown. The tendency to stool is greater after the first cutting, and the hay is finer from the second cutting.

Sudan Grass is not very particular as to soil but does best on rich loam, fairly well drained.

In seeding Sudan Grass, a firm seed bed is best and should be made quite fine. Seed should not be sown until the soil is well warmed up. The best tool for seeding is the common grain drill, and seed should be covered from half inch to one inch. When drilled in rows 18 to 25 inches apart, 4 to 6 pounds are required. When sown broadcast, 16 to 24 pounds per acre should be used.

Sudan Grass grows strictly erect and stiff enough to be valuable to sow with Cow Peas and Soy Beans as a support. Sudan Grass cures readily and can be cut in the morning and raked in the afternoon. The blades are retained well and if properly handled make a bright, leafy hay of best quality.

From Central United States southward it is possible to have from 2 to 3 cuttings. From seeding to cutting 75 to 80 days are required. The second cutting comes on in about 45 days.

The yields vary from 1 to 8 tons cured hay per acre.

Price—Large pkt., 10c.; 1 lb., 40c., postpaid; 10 lbs., \$2.85; 25 lbs., \$6.75; 100 lbs., \$25.00.

Photograph supplied by Southwest Trail
Sudan Grass

Millet (German or Golden)

True Southern grown-cultivated Tennessee grown stock is far superior to Western grown stock; will grow in any climate or soil, and where conditions are favorable its yield is very heavy; often from two to seven tons per acre of most nutritious feed. It is of special importance, however, to secure the true Southern grown stock.

True Southern grown produces a heavy and luxuriant growth, has very large heads which ripen evenly, and if cut while in bloom or before seed ripens it is a quickly produced, cheap and valuable food, that is eaten readily by all our farm animals.

Have the land well plowed and thoroughly pulverized before sowing. Sow for hay not less than 50 lbs. per acre at any time between May 1st and July 1st. If sown broadcast cover with single stroke of harrow or light board drag, or it may be sown with a grain drill set to sow one bushel per acre, having the hoes hooked up so as not to cover seed over one inch deep. We prefer putting seed in with a drill. (Bu., 50 lbs.) Write for price in larger lots.

Large Pkt., 10c.; lb., 20c., postpaid; 10 lbs., 65c.; 25 lbs., \$1.50; 100 lbs., \$4.75.

Hungarian Millet (Grass)

For good, low ground or rich high land, Hungarian becomes even more valuable than German Millet. It is one of the earliest annual hay crops and can be sown later than any of the millets. Is often sown as a catch crop after early Potatoes or other early maturing crops.

Hungarian is not so large and coarse as German Millet; it is very leafy and much finer in the straw, and if cut for hay before seed is ripe enough to grow or just as it goes out of bloom it is considered nearly equal to Timothy, and under favorable conditions should yield from two to four tons per acre of good, nutritious hay that is relished by dairy cows, young cattle or horses.

Hungarian Grass is generally looked upon as being much better feed for horses than Millet.

Sow from May 15th to July 15th on well prepared soil at the rate of three pecks to 1 bushel per acre. (Bu., 50 lbs.)

Large pkt., 10c.; lb., 20c., postpaid; 10 lbs., 60c.; 25 lbs., \$1.40; 100 lbs., \$4.50.

Write for prices of Ohio and Western grown German Millet. Also in larger lots.

All Prices Subject to Market Changes.

Head Golden Millet

Livingston's Finest Grain Seeds

Selected Seed Oats

We have always realized the importance of supplying growers with the best selected Seed Oats, and we can truly say that our efforts in this direction have resulted in our customers obtaining increased yields by sowing our superior stocks and strongly advise that those customers who wish to secure the best yields, use our northern grown stocks. Many years of experience as growers leaves no doubt as to this matter.

Prices subject to market fluctuations.

Items on this page are shipped at buyer's expense except as noted.

Regenerated Selected Swedish Oats

(See illustration)—Originated and introduced by Garton Seed Co., of England, are now well acclaimed and have given excellent satisfaction. Weighs from 32 to 40 lbs. per measured bushel. The straw is heavy and strong and not liable to lodge. Heads are large, upright and bushy. Grains are white, large, thick and plump with thin hull, making a very fine appearance and very desirable for feeding. Their strong root development enables them to withstand drought better than many varieties; are quite early and less liable to damage by rust than many sorts.

Price—Lb., 15c. postpaid; pk., 35c.; bu., (32 lbs.), \$1.15; 2 bu., \$2.20; 5 bu., \$5.25; 10 bu., \$10.00. Bags free.

Silver Mine Oats

This Oat has reputation of long standing and is noted for its heavy and reliable yielding properties. It is very hardy and produces beautiful white kernels very desirable for the manufacture of rolled oats. The heads are large and sprangled and borne low down on the stalk, which is stiff, bright and clean and seems to prevent lodging. We have handled this very reliable Oat for a number of years. Many farmers will sow no other sort, as they offer all the desirable points, namely: Large, plump, white grain, good straw, medium early and good yielder. Price—Lb., 15c., postpaid; pk., 35c.; bu., (32 lbs.), \$1.15; 2 bu., \$2.20; 5 bu., \$5.25; 10 bu., \$10.00. Bags free.

New Victory Oats

Is an Oat introduced from Sweden and grown by us on our Kirkersville farms for the past three years on both strong upland and muck, and are much pleased with them, and offer them to our customers with full confidence that they will give satisfaction.

The head is large, well spread and filled with large, plump, rather barley-shaped, white grain. Straw is quite stiff and of good length. Stools freely, especially when sown thinly. This Oat being of new blood and from an Oat-growing country leads

us to predict for them a successful future.

Price—Lb., 15c., postpaid; ¼ bu., 45c.; bu., (32 lbs.), \$1.25; 2 bu., \$2.40; 5 bu., \$5.75; 10 bu., \$11.00.

Spring Wheat (60 Lbs. to Bushel)

Marquis (New)—Is similar to Red Fife; quite early; beardless; yellow chaff, very plump, flinty kernel; said to be one of the best. Lb., 20c., postpaid; by express or freight, pk., \$1.10; bu., \$3.75.

Blue Stem—A very popular variety in the Northwest. Heads are large and well filled; stools freely; kernels very hard. Lb., 20c., postpaid; by express or freight, pk., \$1.10; bu., \$3.75.

Barley (48 Lbs. to Bushel)

The Best Nurse Crop for Sowing With Alfalfa

Beardless—Barley needs a rich land, more sandy and lighter than that adapted to Wheat. It is sown in the Spring and can be grown farther North than any other grain. It should be cut before fully ripe (unless intended for seed), as it is then of better quality and less liable to shell. Use about 2 bushel per acre. Lb., 20c., postpaid; pk., 65c.; bu., \$2.40; 10 bu., \$23.00.

Speltz or Emmer (40 Lbs. to Bushel)

A valuable grain recently introduced from Russia. It is adapted to dry sections and poor soil, often yielding 50 bushels or more of grain per acre. The straw and grain of Speltz have feeding value equal to barley and are relished by all kinds of stock. **Sow in the Spring**, 50 lbs. per acre. Large pkt., 10c.; lb., 15c.; postpaid; 10 lbs., 60c.; 25 lbs., \$1.25; 50 lbs., \$2.25; 100 lbs., \$4.25.

All prices subject to market change.

Beardless Barley

Livingston's Thoroughbred Field Corn Seed

Prices of all Farm Seeds quoted in this Catalogue are subject to market changes. The prices given are those ruling at the time this Catalogue is published, January 1st. But we reserve the right to change prices without notice. One bushel of Field Corn Seed will plant from five and one-half to seven acres, according to variety and whether the hill or drill method of planting is followed. Livingston's Thoroughbred Field Corn Seed only costs you 60 to 70 cents

for sufficient seed to plant an acre. Our strains are pure and each a distinct type—no two resembles one another, and all grown in Central Ohio. Situated, as we are, in the very best territory in this country, for growing and perfecting Field Corn, we would impress upon you the fact that our facilities and opportunities for securing and supplying the most thoroughbred strains of Field Corn are not exceeded by any seed firm.

All our Field Corn Seed is well manted, thoroughly cured, and shelled with the greatest care. We test all varieties before sending the seed to our customers, that there may be no doubt as to the vitality. To avoid delay when ordering late in the season, it would be well for you to mention your second choice, or state whether we shall send you a sort adapted to your locality, or refund the money, provided we are sold out of your first choice when your order arrives. Field Corn Seed on the ear can only be supplied while our present stock lasts.

Livingston's Golden Surprise

The Large Amount of Corn Produced on Such Small Cobs Surprises Everyone. Entirely Distinct. Stalks Short and Strong. Ripens in 90 to 100 Days. Ears Medium Size. Deep Grained. Small Cob. A Great Feeding Corn.

A variety of great merit offered and named by us in 1898, and, as anticipated, it has met with great favor wherever it has been tested. Our description of Golden Surprise Field Corn consists of plain statements and simple facts.

Our illustration is from a photograph, and will give you an accurate idea of the ears. The Corn, as a whole, is indicative of its name, and is indeed a genuine surprise to all who grow it. Beautiful in its rich golden color and even size from butt to tip of the ear. Profitable in its depth of grain and small per cent of waste in cob. Convenient in its short fodder growth and easy break of ear from the stalk. Certain in its early maturity, and, all points considered, the best early Corn up to date.

Golden Surprise was not offered to the general public until after ten years of the closest careful, critical observation and selection to its present perfect type. Tested for years in various localities in comparison with well-known sorts, we find it equal in average bulk to any on the market, but in depth of grain and weight of shelled Corn per bushel, it has no competitor. Its habit of growth is vigorous, medium sized, strong stalk, with broad leaves, which makes it a valuable fodder Corn. For prices, see below.

Neller's Cattle Corn

This very desirable strain of Corn was brought into Licking County, Ohio, from an adjoining county some thirty or more years ago by a local cattle breeder. And as it was especially well adapted to cattle feedings, became very popular wherever tried not only for cattle feeding, but for general feeding as well.

Our attention was directed to this Corn some time since and six years ago when good seed Corn was so hard to procure, we introduced it to our trade through our retail store. Five years ago we catalogued this variety and reports from all directions to this date, (October, 1917) are especially satisfactory and we look upon it as one of our very best strains for general growing: quite uniform in shape and style of ear and a sure cropper.

The corn is a good strong yellow in color, has deep, well-formed kernels, well-dented but not chaffy, set on a small dark red cob. Ears have 12 to 16 rows and often 12 inches long and well-grained over the ends, fodder an average in size and leafage. In this locality will ripen in 90 to 100 days.

Prices: Shelled, large pkt., 10c.; lb., 25c.; 2 lbs., 40c. postpaid. Express or Freight, not Prepaid. $\frac{1}{4}$ bu., \$1.25; $\frac{1}{2}$ bu., \$2.25; bu., (56 lbs.) \$4.25; 5 bu., \$20.75; 6 select ears, 75c.; bu., (68 lbs) of ears \$5.00.

W. C. Clou, Tuscarawas County, 1916, writes: I have used your seeds for over 20 years and always found them very satisfactory.

All Prices Subject to Market Changes.

Golden Surprise

Neller's Cattle Corn

NOTICE. Do not forget that our field corn is all grown in Central Ohio, and fully acclimated. This should not be overlooked in deciding where to place your order.

Kilbury's Yellow Hybrid

Introduced by Us in 1908

A New and Very Desirable Variety. Earliest Large-Eared Corn in Cultivation. Handsome, Uniform Ear. Deep Grains.

This splendid Corn is one of the most valuable new varieties which has come under our notice for a long time. (See illustration.) The following is originator's description: "Kilbury's Yellow Hybrid Corn is deep in color, with red cob, which tapers uniformly from butt to tip, with deep grains well compacted on cob. Ears large, from 9 to 12 inches in length. Fodder large; ears $3\frac{1}{2}$ to 5 feet from ground, husks easy; does not fall off in handling. The earliest large Corn on the market. Plant any time in May; it has matured planted as late as June 15th. This corn has been successfully grown for 20 years on black loam and clay soils, and is well adapted to both."

After careful examination of this Corn, both growing in fields and after being harvested, we believe it to be all that Mr. Kilbury claims. It is the result of careful selection from hybrids, of Leaming and Clarage, but is much larger than either of the parents. It is a large, medium early Corn; safe to plant in localities no colder than Ohio. If you want the **earliest big-eared** Corn grown, with large, heavy, deep grains and small cob, a yellow corn, plant **Kilbury's Yellow Hybrid**. For prices see below.

Johnson County White Dent

This variety is a cross between Boone Co. White and Forsythe Favorite and developed and introduced by L. B. Clore and has had 21 years of careful, pains-taking and intelligent selection and breeding. For the corn-growing belt, we are quite sure there is no White Corn grown today of equal merit. The Corn has become famous for yield and quality and especially valuable where one wishes to grow show stock.

The shape of the ear is cylindrical to within about 2 inches of the tip, then slightly tapering. Tips fill well over the end and a large per cent of the ears are entirely covered with grains; the butts are well rounded out with a medium-sized shank, kernels very uniform wedge-shaped, pure white, and white cob; ears average about 10 inches in length with the circumference about three-fourth of the length.

Of strong and vigorous habit of growth and well covered with broad blades—very valuable for ensilage. The length of season is about 120 days. This corn has been successfully grown as far north as Ft. Wayne, Ind., or Marion, Ohio. We especially recommend it for the great corn-growing valleys in latitudes of Columbus and south.

Prices: Shelled, large pkt., 10c.; lb., 25c.; 2 lbs., 40c.; Postpaid. Express or Freight, not prepaid $\frac{1}{4}$ bu., \$1.25; $\frac{1}{2}$ bu., \$2.25; bu., (56 lbs.) \$4.25; 5 bu., \$20.75; 6 select ears, 75c.; bu. (68 lbs.) of ears, \$5.00.

As corn prices are made before corn conditions are fully known, those wanting larger quantities will please write for special quotations.

All Prices Subject to Market Changes.

Kilbury's Yellow Hybrid

Johnson County White Dent

Corn (Continued)

The splendid varieties of Corn described and priced in this catalogue have all been grown especially for seed and will be found well cured and true to name—in fact, first-class in every respect. We would ask our customers to place their orders as early as possible while our stocks remain unbroken. Prices of Field Corn by Packet and Pound include postage. On larger quantities, by Parcel Post express or freight, purchasers must pay the transportation charges. See page 3 for Parcel Post rates.

True Yellow Leaming

The Standard Variety for Quality

An extensively grown, large, Yellow Dent variety, which we have grown and sold with the greatest satisfaction for years. Our Improved strain we do not believe is excelled, if equaled, by any other now offered. It has pure, glossy yellow ears growing low, on very strong, heavy stalks; grains square and deep; ripens quite early—frequently in 100 days from planting. Yields from 75 to 100 bushels per acre. Adapted to rich soils. (See illustration.)

For prices, see below.

All prices subject to market changes.

True Yellow Clarage

Best Second Early. Sure to Ripen

This variety has been grown extensively in this locality for over 50 years, and is one of the surest cropping varieties ever grown here. Ripens between Pride of the North and True Yellow Leaming. Ear medium in size, very uniform its entire length and well filled out at both ends. Husks very easily; of rich golden yellow color and very productive. In favorable seasons will ripen planted as late as the first of July. Highly recommended as one of the best in points of early maturity, productiveness and very rich in feeding qualities. (See illustration.)

For prices, see below.

White Cap Yellow Dent

An old popular variety. This old favorite has been known for many years as a good yielder on all kinds of land. A very strong and hardy strain and recommended for thin soils. The ears are large and well covered, cob is both red and white. The grain has white cap, is well dented and of good depth with lemon colored body. Can be planted safely in any part of Ohio and similar latitudes. For price, see below.

Pride of the North

A very early Yellow Dent Field Corn, and can be successfully grown farther North than can any other Dent variety. It ripens very readily, even in New England. It also matures perfectly in 90 days and is very frequently safe from frost in 75 days. Very hardy, ears of uniform size; too small for a main crop, but right size for stock feeding; cob small, kernels set closely on cob and are long and compact. This variety is planted quite largely for early crop to feed stock while yet green; and is also planted late when larger varieties could not possibly mature before the frosts.

UNIFORM PRICES FOR ALL VARIETIES LISTED ABOVE:

Prices: Shelled, large pkt., 10c.; lb., 25c.; 2lbs., 40c.; Postpaid. Express or freight not prepaid, $\frac{1}{4}$ bu., \$1.25; $\frac{1}{2}$ bu., \$2.25; bu., (56 lbs.) \$4.25; 5 bu., \$20.75. 6 select ears, 75c.; bu., (68 lbs.) of ears, \$5.00.

True Yellow Leaming Field Corn

True Yellow Clarage Field Corn

Livingston's Mammoth White Dent Field Corn

Has been Grown Continuously on One Farm for Over 50 years

A very large White Dent Field Corn. Has a broad, very deep, pure white kernel and cob. Grades strictly white in any market. It is very desirable for white cornmeal, and those desiring a large white corn cannot fail to be pleased with this splendid variety. As a grain crop or for ensilage we consider it the equal of any variety we have ever seen tried, and have sold it in large quantities to nearly all the dairymen around this city and many others throughout the country. We have sold this excellent Corn for many years past, and we can honestly pronounce it one of the best large White Dent sorts. (See illustration.) For prices see below.

Reid's Thoroughbred Yellow Dent

(See illustration to the left, from our own photo.)

If any seed grain can truly be called pedigreed, the Reid's Yellow Dent Field Corn is certainly entitled to be known as such, as its history dates many years back. It has been bred up and selected with painstaking care to what is at the present time one of the best varieties of yellow Corn grown. Ear medium in size, remarkably uniform, and one of a bright yellow color, with solid, deep grain and small red cob. Has from 18 to 24 rows of kernels on the cob, 50 to 60 grains in the row and is well filled over the ends, and especially the butt, leaving a small shank, which makes it a great favorite with husners. Best shredding sort, as it shatters the least of any by actual test.

The Iowa Experiment Station report of 1901 gave the Reid's Yellow Dent an average of 100 bushels per acre, while the Agricultural Students' Union of Ohio in 1903 gave it a yield of 14 per cent above all other varieties. For prices see below.

Prices: Shelled, large pkt., 10c.; lb., 25c.; 2 lb., 40c.; Postpaid, Express or Freight not prepaid, $\frac{1}{4}$ bu., \$1.25; $\frac{1}{2}$ bu., \$2.25; bu., 56 lbs., \$4.25; 5 bu., \$20.75; 6 select ears, 75c.; bu., (68 lbs.) of ears, \$5.00.

Fodder and Ensilage Corn Varieties

Red-Cob Ensilage Corn

A Southern type of large, white corn, with strong, leafy stalks and short joints. Farmers growing the Red-Cob Ensilage for the first time tell us they hardly know what to do with the enormous yield of fodder. Pk., \$1.00; bu., \$3.00; 2 bu., \$5.80; 5 bu., \$14.00; 10 bu., \$27.00.

Mammoth White Dent Corn

See top of page for description and price.

True Yellow Leaming Corn

See page 72 for description and price.

Popping Corn

Livingston's Tom Thumb or Japanese Hulless

A new dwarf growing Pop Corn, heavy yielder, attractive ears peculiar in form, deep grains and almost free from hull when popped. Excellent quality. For full description and illustration see specialty pages. Price nice sample ear, 15c.; pkt., 10c.; $\frac{1}{4}$ lb., 15c., postpaid.

Selected White Rice

Our stock of this variety is choice, having been selected very carefully for many years. This variety is the best for popping; grains pointed; pops full and white; ears large sized, very handsome; productive, excellent quality; very crisp and delicious. By mail, postpaid—Nice Sample Ear, 15c.; pkt., 5c.; $\frac{1}{4}$ lb., 15c. By Express or Parcel Post, not prepaid 5 lbs., \$1.00; 10 lbs., \$1.75; 25 lbs., \$3.75.

All Prices Subject to Market Change

Reid's Yellow Dent

Mammoth White Dent

Various Types of Sorghum (The Great Dry Land Forage Plants)

Sorghum, or Sugar Cane

(50 lbs. to bushel.)

For Fodder—Sow 1st to 15th of June, 100 lbs. seed per acre, and harrow to cover 1 to 2 inches. Harvest after first frost. Cut with self binder or mower, and after three days of sun put up in large cocks and feed from field, or store in long, 8-foot-wide ricks near feed lot. Yield 8 to 10 tons per acre. Cows and all stock do as well when fed on it as on grass. They will eat it up "slick and clean." Our sales grew from a few hundred pounds to many tons as soon as we found out and recommended this way of growing it. **For Syrup**, plant in hills and cultivate same as corn.

Early Amber Cane—The earliest and makes the finest quality of forage or syrup. Oz., 5c.; 1 lb., 25c., postpaid; 10 lbs., \$1.00; 50 lbs., \$4.50; 100 lbs., \$8.00.

Early Orange Cane—A strong grower; stalks heavier and a little later than Amber. Oz., 5c.; 1 lb., 25c., postpaid; 10 lbs., \$1.00; 50 lbs., \$4.50; 100 lbs., \$8.00.

Write for prices on larger quantities, stating amount you can use. Will send samples gladly if you so desire.

Kaffir Corn

A Great Fodder Crop. The Finest Grain for Poultry and Pigeons

(50 lbs. to bushel.) Eaten by all domestic animals, whether fed in the grain or ground and cooked. For grain sow at rate of 5 to 7 lbs. per acre and cultivate same as corn. Average yield 50 bushels per acre. For hay, sow in drills or broadcast at rate of 50 to 75 lbs. per acre, and cut when seed is coming to the dough stage. Makes valuable hay, yielding from 5 to 10 tons per acre. Oz., 5c.; 1 lb., 25c., postpaid; 10 lb., 75c.; 50 lbs., \$3.50; 100 lbs., \$6.00.

Feterita

Feterita

An Extra-Early Strain of White Kaffir Corn

A New Non-Saccharine Cane

Introduced 1912, has again proved its worth planted on both muck and upland on our own farms and has verified the claim we made for it last year. In fact, we thought so well of it that we give it a place on Catalogue Cover 1915, and recommend it with full confidence to all Poultry men, and for use wherever Kaffir Corn can be used. It is twenty to thirty days earlier than Kaffir Corn and more productive, heads equally as large, withstands drought as well or better and branches from the root. One seed produces anywhere from 3 to 10 stalks usually 6 to 8 each bearing a full-sized head, all filled with fine white plump grains—a little larger than Kaffir Corn. The stalks are well covered with large blades from the ground up, and after the heads are removed there is from two-thirds to three-fourths as much stover left as would be furnished by any average crop of corn. Seed planted after April 16th ripe and harvested on our lands Sept. 21st. Plant a few acres to feed your hens and fill your egg basket. It is one of the surest croppers and one of the best feed for poultry and pigeons. Owing to its earliness the best of its class for latitudes south of Chicago.

Prices: Pkt., 5c.; 1 lb., 25c., postpaid; 10 lbs., \$1.00; 50 lbs., \$4.50; 100 lbs., \$8.00.

All Prices Subject to Market Changes

Head of Sorghum

White Kaffir Corn

Items on this page are sent at buyer's expense, except as noted.

Peanuts

Improved Large Virginia

A very profitable variety to grow, and is easily cultivated, very erect; the largest pods and kernels with fewer imperfect pods than any variety. The vines make valuable forage for stock. (Bu., 22 lbs.) By mail, large pkt., 10c.; ¼ lb., 20c.; postpaid; 5 lbs., \$1.50; 10 lbs., \$2.50.

Sweet Spanish Peanut

The earliest variety grown. Pods are small, remarkably solid, well filled and of an extra fine quality. Yield per acre very large. Large pkt., 10c.; ¼ lb., 20c., postpaid; 5 lbs., \$1.50; 10 lbs., \$2.50.

Canada Field Peas

Every year there is more inquiry for Field Peas. They stand in the front rank as a fodder, especially for hogs. They can be fed green or dry. They will grow on land that will not produce clover. Sow 1½ to 2 bushels to the acre, or, if with oats, sow 1 bushel of each. Sow the peas first and plow under 4 to 5 inches; then oats on top and harrow in. Pk., \$1.75; bu., (60 lbs.) \$6.25. For large quantities, write for prices, stating quantity you can use.

All Prices Subject to Market Changes

Patatas Livingston's Superior Seed Potatoes Kartoffeln

The necessity for changing seed often is universally admitted by all well-posted growers, especially when the best seed can be had at so little additional outlay. Owing to the perishable nature of seed potatoes and the unsettled condition of all markets, prices are made subject to market changes and conformation of order on receipt of same.

Special Instructions

Owing to the perishable nature of seed potatoes and the unsettled condition of markets, all prices are made subject to market change and conformation of order on receipt of same, and will fill orders just as soon as the weather, in our judgment, will permit. However, we cannot become responsible for changes in the weather by which the potatoes might be damaged while en route. We will ship at any date our customers may designate, when requested to do so, regardless of the weather, if customers wish to take their own risk. When ordering late, please state whether we shall return the money or send some other kind of equal value, provided we cannot supply the sort ordered. Please give plain and explicit shipping directions.

Order Seed Potatoes Early. We would most earnestly request our customers to send in their orders early. We then book and fill them in the order received. By so doing you take very little risk in getting what you want, as compared with waiting until the last moment.

Seed Potatoes by Express or Freight

At Barrel, Bushel, Peck, Half-Peck or Pound Prices, buyer pays the freight or express charges. Our barrels contain 2¾ bushels. Bushel 60 lbs.

Seed Potatoes by Mail

Prices for small quantities of any of our Seed Potatoes, unless otherwise quoted: Lb., 15c.; 3 lbs., 35c., not postpaid.

All transportation charges must be paid by the buyer, except when offered postpaid, by mail. No potatoes sent C. O. D.

Culture

Any good soil will produce Potatoes, but a sandy loam is best. Make furrows of good depth, 3 feet apart; drop the cut seed pieces about 8 or 10 inches apart. If grown in hills, one or two pieces of potatoes, containing one or more eyes in each piece, are placed in each hill, which are made 3 feet apart each way. Cover the seed four inches, but not so deep in wet, cold land. When the sprouts appear, cultivate and hoe to keep the soil free and clear of weeds. As the vines increase, draw earth around them, forming a slight ridge. Just as soon as the bugs appear use Paris Green. One peck will plant about 100 feet of row or 100 hills. Ten bushels are required to plant an acre.

By planting **Our Northern Grown Seed** you are assured of **Early Maturity, Increased Yield and a Vigorous Growth.** To produce healthy stock we use first-class potato land, nothing but pure, well-matured, good-sized seed. The seed potatoes are very carefully handled when digging and barreling, that they may not be bruised or otherwise injured. Our seed potato stocks should not be compared with potatoes picked up on the market named at a guess, and sold for seed.

Seed Potato Eyes

For those at very great distances, or where for any special reasons the express or freight charges would be exorbitant, these Seed Potato Eyes afford an inexpensive way to obtain and test any of the varieties we offer. Three dozen Eyes, any kind, 30c., postpaid.

Extra Early Cobbler (Irish Cobbler)

THE RELIABLE POTATO

One of the most reliable first-early Potatoes ever sent out. It ripens almost with the Early Ohio and is so uniform that every hill seems to ripen at one time. The yield is very large for an early variety—equal to some of the late ones. Form oval and round; skin lightly netted, creamy white and having few eyes, which are quite shallow—some even with the surface. Flesh pure white and of the finest quality—not exceeded by any early variety. Keeps perfect until Spring, when it starts large, strong and vigorous sprouts. Its strong growth, earliness, uniformity, large yield, fine quality and very handsome appearance have brought the Extra-Early Cobbler right to the front as a profitable variety for market or home use.

PRICES—Choice Sorted Northern Grown Stock: ½ pk., 45c.; pk., 80c.; ½ bu., \$1.50; bu., \$2.75; bbl., \$7.50.

Extra-Early Ohio

Extra Early Ohio Potato

Our Specialty—A Grand Potato

Some early varieties will yield edible Potatoes about as soon as the Extra-Early Ohio, but their tops will be green for days after the Extra-Early Ohio have fully ripened. The Extra-Early Ohio is fully two weeks ahead of the Early Rose, and is a general favorite with potato growers and marketmen alike, and is the most profitable Potato they can possibly grow. The sprouts are very strong, the vines grow erect and are easy to cultivate. Maturing early, it brings the highest prices, and the land can be used for another crop after it; does well on any soil suitable for Potatoes. The tubers grow compact in the hill, are easily dug, with very few small ones—nearly every Potato is of marketable size; has few eyes, which are even with the surface. With heavy manuring, close planting and good culture, a very large and profitable crop can be expected—300 to 500 bushels per acre is not an unusual yield. We are confident that many growers do not really know a true Extra-Early Ohio, and have been growing some other sort for it. We know ours is right, because the stock is the product of original headquarters seed.

PRICES—Choice Northern Grown Seed: ¼ pk., 40c.; pk., 75c.; ½ bu., \$1.45; bu., \$2.65; bbl., \$7.25. Special prices will be quoted on larger quantities.

Extra-Early Cobbler

The "Livingston" Potato

It is "a White Seneca Beauty," and the Seneca Beauty is admitted by all who have ever grown it to be one of the most beautiful of the many rose-colored varieties; and those familiar with it will at once realize what a beauty it would be in a white jacket, and especially if it retained its delicate Peachblow eyes. This is exactly what we have in "The Livingston." It is a very strong grower and most productive and not subject to blight. Tubers of beautiful form, medium to large size, oblong, and of uniform thickness; slightly flattened; skin white and slightly russeted—all of which denotes the very highest quality. Cooks dry and has splendid flavor. Prices—Choice Sorted Northern Grown Stock: $\frac{1}{2}$ pk., 50c.; pk., 90c.; $\frac{1}{2}$ bu., \$1.65; bu., \$3.00; bbl., \$8.25.

The Seneca Beauty Potato

Very Smooth, Uniform Size, Almost Blight-Proof, Productive, Splendid Quality, Fine Keeper

A grand, good, medium-late Potato, and too much has not been said in its praise. Its beautiful and distinct appearance sells it in any market and its fine table qualities please all. The tubers are large and smooth, with few eyes close to the surface, and of a beautiful pink color. Uniform in size and shape, scarcely any small ones. Vines rank and healthy, and loaded with beautiful blossoms. Good keeper and a heavy cropper. Prices—Choice Sorted Northern Grown Stock: $\frac{1}{2}$ pk., 50c.; pk., 90c.; $\frac{1}{2}$ bu., \$1.65; bu., \$3.00; bbl., \$8.25.

A. A. Jacquemin, Highland Co., Ohio, writes: "I had fine luck with your Early Ohio Potatoes and all other seed." 1916.

Mrs. Wm. Speck, Seneca Co., Ohio, writes April 28, 1917: "The potatoes have come and we are more than pleased and want to thank you."

A. B. Jones, Orleans Co., New York, writes March 1, 1917: "Last year I purchased one bushel of your Extra Early Ohio Potatoes and out of five different varieties planted, it was the only one which even returned the seed at harvest time. I got \$2.00 per bushel for them. I did not keep any seed, now I must have some more seed."

Livingston Banner

Livingston's Banner Potato

The Best Main Crop Variety

The Banner is a seedling and is one of the finest main crop white Potatoes on the market. No Potato ever made so good a record in so short a time with all classes of growers and on all kinds of soils. None surpass it in uniform, handsome appearance. Its slightly rusty skin is of a light, cream-white color. Its shape is a little oblong and slightly flattened (cooking through easily). The eyes are very shallow. The size is large and desirable, very few being under marketable size. Always smooth and regular in form; grows strong and vigorous from the very sprout. Is also a great drought resister. As near blight and scab proof as any variety we have ever known. The flesh is very white and whether boiled or baked is of the same delicious tasty quality. Medium late. Choice Sorted Northern Grown Stock: $\frac{1}{2}$ pk., 40c.; pk., 70c.; $\frac{1}{2}$ bu., \$1.30; bu., \$2.25; bbl., \$6.15. Write for special prices on larger quantities.

Livingston's Rusty Coat Potato

Uniformly long and slightly flattened; is entirely free from prongs, and the eyes are even with the surface. Beautiful buff skin, heavy netting, like a russet apple; flattened shape; of very highest quality, especially as a potato to bake. Its flesh is of the finest texture and very free from hard or black spots. Cooks white as flour, bursting open at any season of the year, and is of the finest flavor. It is an abundant yielder. They sell on sight in the market. This splendid Potato always brings the very highest market prices, and commission men tell us they cannot get enough of them. The seed we offer is strictly pure, hand sorted. Price—Choice Stock Seed, Northern Grown: $\frac{1}{2}$ pk., 40c.; pk., 70c.; $\frac{1}{2}$ bu., \$1.30; bu., \$2.25; bbl., \$6.15.

Rusty Coat Potato

Seed Sweet Potatoes, New Jersey Grown

Carefully dug, handled and stored over Winter for us expressly for sprouting purposes. The seed stocks are selected from the most perfect and prolific hills at the time of digging. We have been bedding and selling this stock for more than thirty years, and find the Potatoes much dryer and sweeter than those grown from Ohio or Western grown seed. We repack before shipping, but we wish it distinctly understood that customers take all risks after we deliver in good condition to express or railroad company here. We book orders at any time, but do not ship until about planting time. Our barrels contain 3 bushels, good measure. No Sweet Potatoes shipped C. O. D. Prices quoted are subject to market changes. Order early.

Up Rivers

Select strain of smooth, short, "chunky" Yellow Jersey Sweet Potatoes, which yield a larger per cent. of marketable stock and sell higher than most other varieties we know. Dry and sweet. A splendid Sweet Potato. This is our specialty in Seed Sweets; we recommend it as very fine. Ask for price.

Yellow Jersey, or Nansemond

Fine old favorite. Ask for price.

Notice

At time of going to press owing to unsettled condition of market and short crop, we find it impossible to name a price that would be fair, and under these conditions trust that those who are interested will kindly ask for prices. We will take pleasure in quoting lowest price possible on large or small orders.

Mr. H. C. White, Washington Co., Pa., writes: "For your encouragement, I wish to express my appreciation to you for the satisfaction I have always received from your seeds."

OUR list of flower seeds will be found to contain all varieties of real merit. Many times varieties are listed which are of no value whatever in the garden or are so difficult to grow that unless one has every facility for propagation, disappointment is sure to follow the purchase of seed. We want our seeds to give satisfaction and prefer not to have a very extended list, rather than to cause disappointment in any of the varieties procured. Cultural directions will be found on most of our seed packets. We will also give free to customers, on application, a very instructive and helpful leaflet—"Annuals from Seeds."

Annuals are those flowers that bloom and ripen their seed the first year, then die. Among these are Asters, Balsams, Mignonette, Sweet Peas, Nasturtiums, Morning Glories and many other very brilliant and fragrant sorts.

Biennials from seed, generally bloom the second year, then die. Some varieties, if planted early, bloom the first season; therefore are treated as Annuals.

Perennials are those that endure our Northern Winters with little or no protection and live and blooms several years in succession. A large majority of the Perennials will bloom the first year if started early in the Spring. Hollyhocks, Columbine, Larkspurs, Foxglove, Poppies, etc., are in this popular class.

Discounts on Packet Flower Seeds For 25 cents select 6 Five-cent, or 3 Ten-cent pkts. For 50 cents select Packets to the amount of 65 cents. For \$1.00 select Packets to the amount of \$1.30. For \$2.00 select Packets to the amount of \$2.75. These discounts apply **ONLY TO FLOWER SEEDS IN PACKETS.**

☛ **Collections of Seeds in Packets** cannot be included when taking advantage of these discounts.

[illegible]

Semple's Late Branching Aster

Crego Pink

A large variety of a most beautiful shade of pink unlike any other Aster. It comes into bloom just ahead of the late branching Asters and being of Comet type affords variety in the garden. 1409—Pkt., 10c.

1408 Crego White—Similar to above, only white. Pkt., 10c.

1407 Crego Purple—A new color added to this popular type recently. Pkt., 10c.

Asters

The Aster is, perhaps, the most popular annual flower grown in this country, and justly so on account of its ease of culture, season of bloom and lasting qualities both in the garden and as a cut flower. Seed can be sown in the house in shallow boxes (cigar boxes are good), and in the hot bed in March or in cold frames the first of April and later (about May 1st) in the open ground. Transplant the smaller varieties about eight inches apart in the row and such varieties as Semple's Branching, fifteen inches apart the rows to be twelve inches apart. The richer the ground the better your flowers will be and water is very necessary.

Semple's Giant Late Branching

Without question, the finest Aster grown. It has size, vigor, fine stems, beauty of form and varied color to recommend it and, while not so early as many of the other varieties, it stands at the head of the list both for the home garden and as a florist's flower.

1400 Semple's Giant Finest Mixed Colors—All shades and colors. Pkt., 10c.; ¼ oz., 40c.

1401 Semple's Giant Lavender. Pkt., 10c.

1402 Semple's Giant Royal Purple. Pkt., 10c.

1403 Semple's Giant Pure White. Pkt., 10c.

1404 Semple's Giant Crimson. Pkt., 10c.

1405 Semple's Giant Shell Pink. Pkt., 10c.

Collection of Semple's Giant Asters, 5 above sorts, 35c.

Mikado Pink

In type Mikado Pink belongs to the Comet class. Petals are narrow, very long and gracefully reflexed. The outer petals show to their full extent, while gradually toward the center they bend and curl across each other, forming a perfectly double flower. 1381—Pkt., 10c.

Mikado White

A magnificent new Aster, same as Mikado Pink, except in color, which is pure glistening white. 1383—Pkt., 10c.

Pink Enchantress

A new variety of upright growth. The flowers are very double and are produced on good stems. The color is of Late Branching and produces its flowers on long stems. is a mid-season variety. 1492—Pkt., 15c.

Peerless Pink

The introducers of this variety state that it is midway between Crego and the Late Branching varieties and of a beautiful shade of pink. It blooms a little ahead of the Late Branching and produces its flowers on long stems. 1406—Per pkt., 10c.

Queen of the Market

About two or three weeks earlier than most other Asters. They bloom profusely and are of graceful habit. Their shape is very similar to Semple's Giant Branching Aster. The perfect flowers are borne on long stems and in great variety of colors, making them extremely useful for cutting. A favorite sort. Height 1½ feet.

1440 Mixed Colors—All colors in finest mixture. Pkt., 5c.; ¼ oz., 30c.

Separate Colors—1441 Scarlet, 1442 Pink, 1443 Crimson, 1444 Pure White, 1445 Dark Blue, and 1446 Light Blue—Each color, pkt., 5c.

Collection Queen of the Market Asters, 6 separate colors, 20c.

Daybreak

Flowers are very large and double, beautiful shell-pink color. A grand Aster for cutting purposes, growing 2 feet high. 1384—Pkt., 10c.; ¼ oz., \$1.00.

Snowdrift

A white Aster of Comet type and one of the earliest of all. In bloom same time as Queen of the Market. 1485... Pkt., 10c.

Invincible

A very popular Aster in many parts of the country. It is a mid-season variety, very similar in form to the late branching, but flowering a couple of weeks earlier. 1435 White, 1436 Light Rose, 1437 Lavender, 1438 Purple, 1439 Crimson—Each 10c. per pkt.; set of five varieties, 40c.

Asters (Continued)

Violet King

The habit of growth of this Aster is similar to the Blanching type, growing vigorously about 2½ feet high; has long stiff stems. In form the flower is entirely new and distinct from any other variety; round, full and very large, many of the flowers measuring from 4 to 5 inches in diameter. Petals somewhat resemble the quilled varieties, but are much longer and broader. 1380—Pkt., 10c.; ¼ oz., 75c.

Vick's New Early Branching

The habit of growth is identical with its parent, the late Branching Asters. Plants branch freely, are vigorous in growth. They produce flowers on long, stiff stems and luxurious foliage. The shape of the flower is round, and the size extraordinary large. A very valuable flower for commercial growers and the home garden.

The new Aster comes in two dainty and desirable colors—pink and white. Our stock of seed is true and comes direct from the original introducer. 1440 White, per pkt., 10c.; 1411 Pink, pkt., 10c.; 1412 White and Pink Mixed, pkt., 10c.

Purity

Double flowers of a glistening pure white; similar to Daybreak in form and habit. 1386—Pkt., 10c.; ¼ oz., 75c.

Royal

Without doubt one of the best early flowering sorts. It is quite similar, in type of flower, to the Late Branching, but will come into bloom only about a week later than Queen of the Market. The flower stems start from the plant close to the ground, are free from laterals and consequently give their full strength to the production of numerous large, handsomely proportioned flowers. 1486 White, 1487 Purple, 1488 Shell Pink, 1489 Lavender—Each 10c. per pkt.

Truffaut's Peony-Flowered

The improved strains of this grand Aster are considered the finest in cultivation. It is one of the most beautiful and extensively cultivated classes, and it deserves to be, as the large, perfectly double flowers are fine. The petals are beautifully incurved. Very profuse bloomers, producing rich and beautiful flowers. Height 2 feet.

1391 Snow White, 1392 Brilliant Rose, 1393 Rich Crimson, 1394 Sky Blue, 1395 Dark Blue, 1396 Brilliant Scarlet, at 10 cents per packet.

1390 Peony Flowered, Mixed Colors—Fine assortment. Pkt., 10c.; ¼ oz., 50c.

The Collection of 6 separate colors, one pkt., of each as named above, 50c.

Giant Ostrich Plume

A very large-flowering class, the blooms of which are of most perfect shape; splendid for cut flowers. Resemble the Giant Comet Asters, as they have the same curled and twisted petals. However, the petals are longer, and the whole flower larger. Individual blooms often measure 4 to 6 inches in diameter. Plants of luxurious branching habit, with flowers on long slender stems. Height 2 feet.

1417 White, 1418 Rose Pink, 1419 Light Yellow, 1420 Azure Blue, 1421 Lavender, 1422 Dark Blue, 1423 Crimson at 10c per pkt.

1416 Giant Ostrich Plume, Mixed Colors—Embraces all the desirable colors in splendid mixture. Pkt., 10c.; ¼ oz., 50c.

Collection of Giant Ostrich Plume Asters, 7 separate colors, 55c.

Royal

Shell-Pink Rochester Aster

Victoria Asters

The Victoria Asters resemble Trauffaut's Peony-Flowered Asters very closely, except that the petals recurve to the edge of the flower instead of incurving to the center. Superb colors, elegant sort. 2 feet.

1388 Miss Roosevelt (Victoria)—The flowers of this new Aster are of a clear primrose tint, which changes to delicate flesh color, like the popular Glorie de Dijon rose. Fine cut flower. Pkt., 10c.

1459 Pink Beauty—Of upright growth, with flowers carried on long, strong stems. Of chrysanthemum shape with incurved inner and reflexed outer petals. Of beautiful, soft bluish pink color. Pkt., 15c.

1450 Victoria Asters, Mixed Colors—Very fine. Pkt., 10c.; ¼ oz., 60c.

1460 Dwarf Victoria Asters—Perfect flowers of large size, produced profusely. 10 inches high. Effective in beds and borders. Choice Mixed. Pkt., 10c.

Livingston's Exhibition Aster Collection

This magnificent collection contains the finest and most complete assortment of mammoth-flowering Asters it is possible to offer—the newest kinds, all colors, all varieties; early and late. The symmetrical globe-shaped and the fluffy Chrysanthemum sorts.

One large packet each **Semple's Giant Branching, Mixed; Giant Ostrich Plume, Mixed; Giant Comet, Mixed; Trauffaut's Peony Perfection, Mixed; Livingston's Superb Mixture of Giant Asters; Vick's Early Branching Asters; Violet King.**

In the bag with each collection we will enclose our leaflet "Aster Culture," telling how to grow big Asters successfully.

All for 50c., postpaid. At regular rates these seeds would cost 80c.

Livingston's Superb Mixture of Giant Asters

Is absolutely unexcelled. A magnificent mixture, producing beautiful flowers, gigantic in size, gorgeous in colors, perfect in form.

This mixture includes the cream of all the Asters on this and the other two pages, together with many other sorts of the most beautiful forms and brilliant colors. Our special strain has been especially selected from the finest large-sized double flowering types. Height about 2 feet. **1490**—Pkt., 10c.; three packets for 25c.; ¼ oz., 50c.

Asters (Continued)

Vick's Shell Pink Rochester

(See Illustration Alongside)

1493—In this Aster we have another color added to the already popular Rochester type. The color, as the name indicates, is of a soft shell-pink, one of the most popular colors in Asters. The flowers are large and are supported on long, stiff stems. The long, narrow petals are twisted and curled making a very rich effect. Pkt., 15c.

Vick's Autumn Glory

1494—Pure sea-shell pink. While similar in color to Semple's Pink, it has a better and more substantial flower, a deeper and longer keeping color, large and stronger type of plant. Its most distinctive characteristic and chief claim for recognition, however, is the fact that it is later in season than any of the other varieties. The flowers are very double and are borne on stems of unusual length. Pkt., 10c.

Giant Comet Asters

An ideal class for cut flowers, being not only most profuse bloomers, but each individual flower borne on a stiff stem and resembles an exquisite, curled and twisted Japanese Chrysanthemum. Height 2 to 2½ feet.

1430 Giant Comet Crimson, 1431 Giant Comet Light Blue, 1432 Giant Comet Rose Pink, 1443 Giant Comet Dark Blue, 1434 Giant Comet, the Bride, 1428 Giant Comet, Mixed Colors, 1429 Giant Comet Snow White at 10c per pkt.

Collection Giant Comet Asters, 5 separate colors 40c.

"True Blue" Flower Seeds

give uniformly best satisfaction. We test hundred of varieties every year in our trial grounds, and know that you cannot buy better flower seeds, no matter where you buy or what you pay.

Vick's Lavender Rochester

(See Illustration Below)

1495—The magnificent flowers are more double and more Chrysanthemum-like than those of the original Lavender Pink Rochester. The long, narrow petals fall over on another in a charming cascade of color, forming a wonderful shaggy mass that cannot be equalled for richness of effect. In addition to their great diameter they have most remarkable thickness, making them truly massive. Vick's Lavender Rochester is an exquisite shade of clear light lavender. Pkt., 10c.

Lavender Rochester

Sweet Alyssum

Sweet Alyssum

One of the sweet-scented flowers that should always be in every garden. An easily grown annual; fine for beds, edgings or for cutting. In bloom all Summer and through the greater part of Fall.

1325 Sweet Alyssum (Maritimum)—One of most popular of our hardy annuals, both for cutting and for edgings. The pure white flowers are noted for their exquisite fragrance. Blooms continually from earliest Summer until hard frosts. Pkt., 5c.; oz., 30c.

1327 Little Gem, or "Carpet of Snow"—A dwarf, very compact-growing variety, that, while only 6 inches in height, each plant will carpet a circle from 20 to 30 inches in diameter. From early Summer until very late Autumn the plants are a solid mass of snow-white flowers of delicious fragrance. Pkt., 5c.; ¼ oz., 20c.; oz., 50c.

1329 Saxatile Compactum (Golden Saxatile, or "Basket of Gold")—A hardy perennial variety; its flowers are a most brilliant golden-yellow. Fine for rock-work. Nine inches high. Pkt., 5c.; ¼ oz., 20c.

Ageratum (Floss Flower)

Very showy plants; bloom profusely the whole Summer; use as cut flowers. Splendid for borders, ribbon beds, etc. All hardy annuals. (See illustration.)

1312 Perfection Blue—Splendid large heads of deepethyst blue. Compact growth, 9 inches high. Deepest colored of all Ageratums. Fine bedder. Pkt., 10c.; ¼ oz., 30c.

1314 Princess Victoria Louise—A very pretty dwarf variety. Bushes 5 to 6 inches high. Splendid combination with Sweet Alyssum. The color is a bright blue, with white center. Pkt., 10c.; ¼ oz., 35c.

1316 Little Blue Star—Exceedingly dwarf, bushy growth, not over 4 or 5 inches high. Densely covered with clusters of bright blue flowers. Very fine for edging. Pkt., 25c.

1318 Imperial Dwarf Blue—8 inches. Pkt., 5c.

1319—Imperial Dwarf White—8 inches. Pkt., 5c.

1320 Mexicanum—Lavender-blue. 1½ feet. Pkt., 5c.

1321 Finest Mixed—Splendid. Pkt., 5c.; ¼ oz., 15c.

Abronia

Pretty trailing plants with verbena-like fragrant flowers. In bloom a long time. Adapted to beds, rock-work and hanging baskets. Annuals; good mixture; many varieties. 1300—Pkt., 5c.

Abutilon

(**Flowering Maple, or Chinese Bell-Flower**)—Universally admired for garden or house culture; flower the first season if seed is sown early; rapid growth; bear elegant bell-shaped flowers. Half hardy shrubs. 1302 Mixed—Pkt., 10c.

Acroclinium

1308 Rose and White, Mixed—An Everlasting. Yields a great number of flowers, which should be gathered the first day they open and dried in the shade for winter bouquets. Annuals; one foot. Pkt., 5c.

Adlumia Cirrhosa

1310 Mountain Fringe, or Allegheny Vine—A beautiful, hardy climber, flowering the first season. Clusters of small rosy-lilac flowers and pale green feathery foliage. Pkt., 5c.

Amaranthus

1333 Fine Mixed—Foliage brilliantly ornamental, producing a striking effect in the border as a background, or as a center of beds. Of the easiest culture. Annuals; 3 feet. Pkt., 5c.; oz., 40c.

Arabis Alpina

1306—Dwarf perennial plant, covered with pretty white flowers in May. Thrives well in dry, sandy places. Pkt., 10c.

Asparagus

1372 Plumosus Nanus (Climbing Lace Fern)—One of the prettiest house plants. Its feathery foliage is indispensable for bouquets and lasts a long time after cutting. Half hardy perennials. Pkt. (10 seeds), 15c.; 25 seeds, 30c.; 100 seeds, \$1.00.

1374 Sprengeri (Emerald Feather, or Abyssinian Parlor Fern)—This is one of the most beautiful plants for either pot culture or hanging baskets. Useful for bouquets. Grows freely all the year; a popular house plant. Pkt. (15 seeds), 10c.

Asperula

1377 Sweet Woodruff—This charming plant delights in moist, shady situations. Its fragrant leaves and flowers when dried impart an agreeable perfume. Perennials; one foot. Pkt., 5c.

Otis M. Clark, Orange Co., Va., writes: "Last year I used a few sample packages of your seed, but the results were so satisfactory that I wish to plant them more extensively in my garden."

Ageratum

dealing with an honest and reliable firm. Have been using your seeds now for some ten or twelve years and always find them satisfactory."

Giant-Flowered Antirrhinum

(Snap Dragon)

This old favorite is one of the most beautiful and useful border plants of our gardens. Its very graceful flowers are borne on long spikes and in the greatest diversity of colors. The spikes of flowers are most brilliant and showy. Two feet.

1340 Giant White—Pure snow-white. Pkt., 10c.

1341 Giant Rose—Delicate rose-pink. Pkt., 10c.

1342 Giant Scarlet—Brilliant scarlet. Pkt., 10c.

1343 Giant Yellow—Pure soft yellow. Pkt., 10c.

1344 Giant Queen Victoria—Extra large, superb; pure white. Pkt., 10c.

1346 Giant-Flowering Finest Mixed Colors—An elegant assortment of innumerable rich colors and shades, including all the named varieties offered by us. Pkt., 10c.; 3 pkts., 25c.; ¼ oz., 30c.; oz., \$1.00.

Collection Giant Antirrhinums, 5 separate colors, 35c.

1347 Dwarf Mixture—Contains the very choicest colors. 12 inches. Pkt., 5c.; ¼ oz., 20c.

1348 Tall Mixture—The best colors; 2 feet. Pkt., 5c.; ¼ oz., 20c.

Geo. W. Beck, Ogle Co., Ill., writes, Feb. 21, 1916: "The seeds arrived by express O. K. and the order is put up correct. The seeds look good and I thank you for your prompt delivery."

Aquilegia or Columbine

Exceedingly showy, early blooming, hardy plants; always favorites, and of the easiest culture. The graceful, long-spurred flowers are very brilliant. They delight in the moister portions of the garden. The new varieties are greatly enlarged, and the range of colors and shades has been largely increased. Hardy perennial, 1½ to 2 feet.

1365 Chrysantha—This beautiful variety is a clear yellow, having an unusual color in Columbines, and of the long-spurred type. It also has the characteristic of flowering nearly all Summer. One of the best and very hardy. Pkt., 10c.

1368 Coerulea—The true Rocky Mountain variety, a beautiful blue and free-flowering. The State flower of Colorado. A splendid plant for the hardy border. Pkt., 10c.

1356 New Long-Spurred "Rose Queen"—A beautiful novelty, producing in great profusion very graceful, large-flowered, long-spurred flowers, shading from light pink to dark rose, with white center and yellow anthers. Very delicate and beautiful. Pkt., 15c.

1360 Double Varieties Mixed—A very choice assortment. Pkt., 5c.

1362 Single Varieties Mixed—All the best sorts and colors. Pkt., 5c.

Balsam Apple and Pear

1518 Mormordica, Mixed—Very curious vine with ornamental foliage. Its large, golden-yellow fruit opens when ripe and shows its brilliant blood-red inside. Hardy annuals. 10 feet. Balsam Apple and Pear Mixed. Pkt., 5c.; ¼ oz., 15c.

W. T. Fristie, Mason Co., Ky., writes, Mar. 12, 1917: "Thank you for remittance on order as it was my mistake and gives me confidence that I am dealing with an honest and reliable firm. Have been using your seeds now for some ten or twelve years and always find them satisfactory."

Balloon Vine

"Love in a Puff"

1496—Rapid growing, pretty annual climber; delights in a light soil and warm situation; produces white flowers, followed by seed vessels that look like small balloons; makes a fine porch screen. 10 feet. Pkt. 5c.; oz., 25c.

Bachelor's Button—See *Centaurea*, page 84.

Begonias

1523 Finest Mixed—Our strain contains great variety of colors, both in flowers and foliage. A superior assortment. Pkt., 10c.

1524 Vernon—An elegant variety, with bright orange-carmine flowers and very dark leaves. Start the seed early in the house or greenhouse. Pkt., 10c.

1520 Tuberous Rooted, Best Double Mixed—Prize strain. Pkt., 25c.

1521 Tuberous Rooted, Best Single Mixed—Prize strain. Pkt., 25c.

1522 Begonia Rex (Ornamental-leaved Varieties)—A collection of house plants without some of these elegant pot plants seems incomplete. The leathery leaves are bronze, red, silver and gold. Finest sorts. Pkt., 25c.

Aquilegia

Double Balsams

1500 Livingston's Premium Balsams, Finest Mixed—Our strain is unsurpassed. The large, double flowers are as fine as the most elegant Camellia. The size, fine form, varied and brilliant colors of our Premium Balsams are greatly admired. Pkt., 10c; $\frac{1}{4}$ oz., 40c.

1502 Camellia-Flowered White—A superb variety. The flowers are extremely large, full centered, with reflex petals, pure snow-white. The most elegant of all Balsams. Pkt., 5c; $\frac{1}{4}$ oz., 30c.

1504 Double Camellia-Flowered, Finest Mixed—A very choice assortment of all the best varieties and colors in these favorite Balsams. Pkt., 5c; $\frac{1}{4}$ oz., 25c.

1507 Double Lavender; 1509 Double Bright Scarlet; 1511 Double Dark Blood Red; 1513 Double Peach Blossom; 1514 Double Red Spotted White. Each of above separate colors, pkt., 5c; oz., 60c. **Collection Double Balsams, 6 separate colors, 25c. 1515 Double Mixed Balsams, pkt., 5c; oz., 50c.**

Calliopsis, or Coreopsis

One of the easiest grown annual flowers; can be used with fine effect anywhere—in beds, borders or masses. Blooms all the time. Sow the seed thinly when weather becomes warm and soil dry. 1 to 2 feet.

1530 Hybrida Superba—Very showy new hybrids in great variety of color, varying from pale yellow to rich orange and velvety brown. 1 foot high. Pkt., 10c; $\frac{1}{4}$ oz., 25c.

1532 Golden Wave (Dummondii)—Bushy, compact plants covered with very large bright golden-yellow flowers with brown centers. Pkt., 5c; $\frac{1}{4}$ oz., 15c.

1534 Coronata—Showy, large, pure yellow flowers. Pkt., 5c; $\frac{1}{4}$ oz., 15c.

1536 Mixed Tall Sorts—All choice sorts. Pkt., 5c; oz., 25c.

1537 Mixed Dwarf Sorts—For bedding. Pkt., 5c; oz., 30c.

1539 California Sunbeams (Grandiflora)—An improved large-flowering strain. Fine light-yellow and brown blooms. Pkt., 5c.

1540 Lanceolata Grandiflora (Harvest Moon)—One of the grandest perennial plants. Fine in masses, or as cut flowers. The individual blooms are very large and of the richest golden yellow. Pkt., 10c; $\frac{1}{4}$ oz., 20c; oz., 60c.

Calendula (Pot Marigold)

One of the easiest grown, most showy and free flowering, hardy annuals, producing a fine effect in beds of mixed borders; blooms all the time; fine for cut flowers. $1\frac{1}{2}$ feet.

1529 Fine Double Mixed—Contains the choicest sorts. Pkt., 5c; oz., 20c.

Canary Bird Vine **1543**—Easy-growing, free-blooming annual climber for house or garden. Bright yellow flowers resembling a canary bird with extended wings. 10 feet. Pkt., 5c; $\frac{1}{4}$ oz., 15c.

Calliopsis

Campanula (Canterbury Bells)

This old-fashioned flower is a favorite with all. Stately and showy, and of the easiest growth. Hardy biennials.

1560 Livingston's Prize Mixture—An elegant mixture of all the finest classes and colors of single and double and "Cup and Saucer" varieties. Pkt., 10c; 2 pkts., 15c.

1561 Calycanthema "Cup and Saucer"—Our mixture includes all the best colors and varieties. Pkt., 5c.

1563 Finest Double Mixed. Pkt., 5c. 1564 Finest Single Mixed. Pkt., 5c.

1566 Pyramidalis—The Chimney Bell-flower, a hardy perennial flowering in late Summer. Finest mixed Height, $3\frac{1}{2}$ feet. Pkt., 10c.

1568 Carpatica—Beautiful free-flowering, hardy perennial; fine for groups and edgings. Blue and White mixed 9 inches. Pkt., 5c.

Cannas

Cannas seem to be especially adapted to the American climate, as they do well everywhere. They grow nicely from seed, and will bloom the first Summer if started early. It is hard to describe the elegance of a fine bed of Cannas. Soak the seeds in warm water until they begin to swell; then sow them in a box in a sunny window or in the greenhouse. When up to the second leaf, transplant singly into pots and set out in the garden when the weather has become warm and settled.

1580 Large-Flowering French Hybrid Cannas, Mixed—Early flowering, and remarkable for large size and beauty of flower and foliage. This collection contains all that is best in Cannas. Pkt., 5c; oz., 25c.

1582 Dark Leaved Cannas—This mixture contains the very choicest varieties we grow in the dark-leaved Cannas. Pkt., 5c; oz., 20c.

Canterbury Bells

Candytuft (Iberis)

Candytuft is among the most highly prized of Summer flowers, and no garden is complete without a large quantity of it. Grows easily and blooms all the time until frost. Splendid for cut-flowers. Hardy annuals. 1 foot.

1547 Rose Cardinal—Very large umbel of bright rose-cardinal flowers, so prolific that a bed presents an unbroken sheet of bloom. Height 8 inches. Pkt., 10c.; $\frac{1}{2}$ oz., 40c.

1550 Empress, or Giant Hyacinth-Flowered—An improved strain, producing immense trusses of pure white bloom, frequently measuring 4 inches in length by 2 inches through. Fine for bedding and cutting. Height 1 foot. Pkt., 10c.; $\frac{1}{4}$ oz., 25c., oz., 75c.

1545 Large-Flowering Dwarf, Mixed—Pkt., 10c., $\frac{1}{2}$ oz., 45c.

1546 Large-Flowering Dwarf, White—Pkt., 10c.; $\frac{1}{2}$ oz., 45c.

1551 White Rocket—Compact Spikes. Pkt., 5c.; oz., 20c.

1553 Odorata—Pure white; most fragrant. Pkt., 5c.; oz., 25c.

1554 Candytuft, Mixed Annual Sorts—Our mixture contains all the best varieties and colors. Pkt., 5c.; oz., 20c.

1556 Gibraltarica—A dwarf evergreen plant flowering in early Spring and Summer. Much used for rockeries, edging or in the foreground of perennial borders. A fine little plant worthy of more general cultivation. Lilac, shading to white. Pkt., 10c.

1557 Sempervirens—Similar to the above except pure white. Pkt., 10c.

Giant Marguerite Carnations

1586 Giant Marguerite—The flowers enormous; the colors most varied and brilliant, and they come into full bloom in four months from sowing, and continue until hard frosts. Our strains are semi-dwarf and strong growers. 1 foot high. Our mixture is splendid. Pkt., 10c.

1587 Marguerite Double White—Pure white, large flowers; stiff stalks. Pkt., 10c.

1588 Marguerite Double Yellow—Pkt., 15c.

1585 Livingston's "Peerless" Carnation Mixture—All bloom the first Summer. A very choice mixture including all superb sorts. Pkt., (about 75 seeds), 15c.

1590 Chabaud's New Giant Perpetual—Comes into bloom in a little over 4 months from seed; extra large size; fine range of colors; is very sweet-scented. Mixed colors. Pkt., 10c.

1594 Red Grenadin—For yielding a quantity of double red flowers, no outdoor Carnation can equal it. Pkt., 10c.

Celosia, or Cockscomb

Very attractive annuals. The crested heads of flowers resemble a cock's comb. The plumed heads are like great feathers. (See illustration below.) Sow the seed directly in the garden or start early and transplant. Make fine pot plants.

Ostrich Plume Varieties

Very graceful. Handsome, pyramidal plants 3 feet high. Each branch gracefully tipped with brilliantly colored plume resembling an ostrich feather. (See illustration.)

1600 Thompsoni Magnifica—Mammoth blossoms of vivid scarlet; purple, blood-red, golden yellow, salmon, etc. 2 feet. Mixed colors. Pkt., 10c.; $\frac{1}{4}$ oz., 30c.

1602 Gold Plume—Golden Yellow. Pkt., 5c.

1604 Fire Plume—Fiery scarlet. Pkt., 5c.

Collection, the 3 new Ostrich Plume Celosias, listed above 15c.

Comb Varieties

1608 Queen of the Dwarfs—Grows only about 8 inches high. Immense combs of perfect form; brilliant dark rose. Pkt., 10c.

1609 Glasgow Prize—Large and very showy dark crimson combs. 9 inches. Pkt., 10c.; $\frac{1}{2}$ oz., 30c.

1610 Empress—Combs of colossal proportions; rich crimson. Pkt., 10c., $\frac{1}{4}$ oz., 50c.

1611 Finest Dwarf Mixed—A choice mixture of all sorts and colors. Pkt., 5c.; $\frac{1}{2}$ oz., 25c.

Choice Carnations

Seeds may be sown under glass in the spring, or in open ground, but must be protected in the Winter. Half hardy.

1591 Carnation, Giant of Nice—Blooms in four to five months from date of sowing the seed. The flowers are very large; colors varied; very free flowering. Pkt., 20c.

1592 Fine Double Mixed. Pkt., 10c.

Jos. L. Litzinger, Cambria Co., Pa., writes February 22, 1917: "I received seeds alright and am well pleased with same. The seeds are fine. Wishing you every success, I remain."

Miss May Miller, Fairfield Co., O., writes: "The flowers from your mixed bedding Petunias and mixed Phlox last year were the most beautiful I ever saw."

Candytuft

Celosia, Ostrich Plume

Centaureas

The various varieties of this popular annual include such favorites as the Bachelor's Buttons or Corn-Flowers, and Sweet Sultans, old-fashioned flowers of easiest culture. 2 feet.

1616 Bachelor's Buttons (Centaurea Cyanus)—Our strain is especially fine. The true old-fashioned Bachelor's Buttons of your grandmother's garden. Also called Blue Bottle, Ragged Sailor, Korn Blume, etc. Mixed colors. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.; oz., 25c.

1617 Emperor William—Rich, deep blue Bachelor's Button. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.

1618 Double Varieties—A comparatively new strain; about three-quarters of the flowers come double; many choice colors. Pkt., 5c.; $\frac{1}{2}$ oz., 20c.

GIANT-FLOWERING SWEET SULTANS (Centaurea Imperialis)

The blooms are borne on long stems. Of the easiest growth; very showy in the garden all Summer long. (See illustration.)

1620 Giant Mixed Colors—An elegant assortment of colors. Pkt., 5c.; $\frac{1}{4}$ oz., 25c.; oz., 75c.

1621 Giant White—Splendid for bouquets. Pkt., 5c.; $\frac{1}{8}$ oz., 25c.

1622 Giant Odorata—Light blue; very large. Pkt., 5c.

1623 Giant Suaveolens—The popular yellow. Pkt., 5c.

1627 Livingston's Choice Mixed Centaureas—A grand mixture of all the above Bachelor Buttons and Giant Sweet Sultans. Pkt., 5c.; $\frac{1}{4}$ oz., 25c.; oz., 75c.

WHITE-LEAVED CENTAUREAS (Dusty Millers)

Silver-foliage plants; extensively used for edgings, hanging baskets, etc.

1629 Candidissima—Very thick, broadly cut, slippery white leaves. 1 foot high. Pkt., 10c.

1628 Gymnocarpa—Leaves fern-like; silvery gray color. Fine for borders. $1\frac{1}{2}$ feet. Pkt., 5c.

Chrysanthemums

The annual sorts bloom throughout the Summer, while the perennial varieties are gorgeous in the garden every Fall. The plants grow from 1 to 3 feet in height.

SEEDS OF ANNUAL VARIETIES

1632 Double White—Pkt., 5c. **1633 Double Golden Yellow**—Pkt., 5c.

1634 Double Sorts Mixed—All the most desirable colors. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.

1635 Livingston's Choice Mixed Chrysanthemums, Single and Double Sorts—Very desirable for the Summer garden; showy; free-flowering. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.

1654 Tricolor "Northern Star"—Fine hardy annual, with large daisy-like flowers produced freely on long stems. Pkt., 10c.

SEEDS OF PERENNIAL VARIETIES

1641 Japanese Hybrids—The best double-flowering varieties. Pkt., 15c.

1642 Frutescens (Marguerite, or Paris Daisy)—Large, single white flowers. Pkt., 5c.

1643 Maximum (Triumph Daisy)—Large, single, pure white, yellow center. Pkt., 10c.

2433 Shasta Daisy—Pkt., 10c. For description, see page 102.

1644 Chrysanthemum Inodorum (Bridal Robe)—New; pure white; extra fine. Pkt., 10c.

Centaurea Imperialis—Giant-Flowering Sweet Sultan

Cineraria

A favorite free-flowering greenhouse plant, with flowers of great richness and diversity of colors. Cinerarias bloom during the Winter and Spring months and can be planted out in Summer. The plants thrive best in a mixture of loam, leaf-mould and sand.

1648 Livingston's Prize Mixture—Contains only the richest and most beautiful colors; large. Pkt., 25c.

1650 Cineraria Maritima (Dusty Miller)—Silvery white foliage; for edgings, ribbon beds, hanging baskets, etc. 1 foot. Perennial, but usually grown as an annual. Pkt., 5c.; oz., 40c.

Cobaea Scandens

A fine annual climber, often growing 15 to 25 feet in a season. Has handsome foliage and large bell-shaped flowers of a beautiful deep violet-blue. **1658**—Pkt., 5c.

Coleus

Beautiful foliage plants, both for green houses and bedding out in the garden. The striking colors and brilliant variegated leaves are much admired.

1663 Fine Mixed Hybrids—Mixed seed from a very fine collection. Pkt., 10c.

Cyclamen

These elegant greenhouse plants have the most beautiful foliage and the richest colored flowers. Seed may be sown in the Spring and Autumn. For large size blooms, substance and brilliant colors, our strains are unsurpassed.

1683 Livingston's Superb Mixture—Is our best strain; obtained by a continued selection of the choicest varieties of Cyclamen Persicum. The individual flowers are enormous in size; plants are profuse bloomers. The colors are rich and varied. (See illustration.) Pkt., 25c.

1684 Cyclamen Persicum, Finest Mixed—A choice assortment of varieties and colors. Pkt., 10c.

Cypress Vine

Ipomoea Quamoclit—This is a beautiful, rapidly growing annual climber, with delicate dark green finely cut fern-like foliage and masses of the most brilliant and graceful star-shaped flowers. The two shades, white and scarlet, are very striking. Planted by the side of a veranda, tree or stake, and trained properly, nothing is prettier.

1686 Pure White—Pkt., 5c.

1687 Bright Scarlet—Pkt., 5c.

1689 Finest Mixed—A mixture of Pure White and Bright Scarlet. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.

Mrs. Julia Hartsock, Wise Co., Vt., writes, May 9, 1917: "I wish to thank you for your prompt shipment of my seeds. I am well pleased with them."

Livingston's Giant Cyclamen. Pkt., 25c.

Early
Flowering
Cosmos
Pkt., 5c.

Coix Lachrymae

(Job's Tears)—Very ornamental plant, producing hard, shining seeds. Much used for bead curtains, raffia work, etc. 1660—Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

Dahlias

Dahlias are easily grown from seed and bloom the first season. The earlier they are started the better, which can be done nicely in a box in a sunny window or the greenhouse. Some specimens grown from seed are fully equal to many of the named sorts, and there is always the chance of getting some entirely new varieties. The Single Dahlias are being planted more extensively every year; they are quick and profuse bloomers, and their colors are especially rich and brilliant.

Do not miss the novelties listed in the front of this catalog.

Seeds from Single Dahlias

1693—**Twentieth Century or Orchid-Flowered**—A truly exquisite single Dahlia. Has created a sensation everywhere. Individual flowers are 5 to 8 inches across. Innumerable colors, that have the sheen of velvet. We cannot describe their elegance. Pkt., 10c.

1695 **Large-Flowering Single Mixed**—Splendid assortment of single-flowering varieties. Pkt., 5c.

Seeds of Double Dahlias

1698 **Large-Flowering Choicest Double Mixed**—This element assortment of seed is saved from round, double flowers; many beautiful colors. Pkt., 10c.

1702 **Cactus Varieties, Choicest Mixed**—Most popular at the present time; distinct and elegant; petals pointed; blooms perfectly double. Pkt., 10c.

1705 **Livingston's Superb Dahlia Mixture**—This splendid assortment embraces every variety of Dahlias, both single and double, described on this page, as well as many other fine sorts. Will make an elegant bed at small cost. Pkt., 15c.

Mrs. H. C. Hartwell, Worcester Co., Mass., writes: "Your Foxgloves and Pinks got first prize at our flower contest, blossoms from seed sown last Spring, so there are several people very anxious for your catalogue, to buy perennial seeds for next Summer's show."

Livingston's Mammoth Cosmos

None of our Autumn flowers are more prized than the Cosmos. The thrifty plants produce thousands of the most elegant blossoms, in pure white, pink, and crimson shades. As a decorative garden plant its value is inestimable, while as cut flowers for home decoration nothing is finer, especially as Cosmos are in bloom when other outdoor flowers are getting scarce. Plant the seed directly in the garden as soon as the settled Spring weather comes, or you may start the plants early in a box in the house and transplant them. In the garden set the plants 1 foot to 18 inches apart. One of our most desirable and easy-growing annuals. 5 to 6 feet.

Early Summer-Flowering Cosmos

1668 **Dwarf Early-Flowering "Dawn"**—Coming into flower in July, continuing until frost. Can be grown in the North where the seasons are too short for other strains. Dwarf, compact growth—4 feet. Flower beautiful and large; petals broad, pure white, flushed with a delicate tinge of rose; profuse bloomer. Pkt., 5c.; ¼ oz., 15c.; ½ oz., 25c.

Dwarf Early-Flowering Mixed

1669 **Mixed**—Identical with above, but contains all elegant colors known in Cosmos. Pkt., 5c.; ¼ oz., 15c.; ½ oz., 25c.

Mammoth Perfection Cosmos

Giants of California—A magnificent strain. The individual flowers are of enormous size and the most perfect form, while the colors are richly brilliant. These represent the highest developed types in Cosmos. Will keep a week in water after being cut.

1672 **Mammoth Perfection, Mixed**—A superb mixture of every color and shade in these splendid Cosmos. Pkt., 5c.; ¼ oz., 15c.; oz., 50c.

1673 **Mammoth Perfection, Pure White**—A splendid large flower. Pkt., 5c.; ¼ oz., 15c.

1674 **Mammoth Perfection, Light Pink**—Blossoms are truly superb. Pkt., 5c.; ¼ oz., 15c.

1675 **Mammoth Perfection, Crimson**—A rich and brilliant shade. Pkt., 5c.; ¼ oz., 15c.

New Gigantic Orchid-Flowered Cosmos

1680 Lady Lenox

This gigantic Cosmos is the forerunner of an entirely new race of Cosmos. It is of extraordinary size and beauty. Visitors to the floral exhibitions last Autumn were enraptured with its size and magnificent color. Flower 4 to 5 inches in diameter. Color a delightful shell pink, lighting up beautifully at night. 6 to 7 feet high. Splendid variety. Pkt., 10c.; 3 for 25c.; ¼ oz., 25c.

Double Dahlia

Giant Double Daisies (Bellis Perennis)

Giant Double Daisies

A charming little plant for pots, edgings and borders. (See illustration.) Sow the seeds very early and plants will bloom the first season and continue to bloom each season if given some protection during Winter. They do best in a rich soil and quite cool situation. Especially desirable for cemetery decorations. Perennial. Height about 6 inches.

1710 Giant Longfellow—A very desirable double sort; dark pink; flowers very large. Pkt., 10c.

1711 Giant Snowball—A large and very double pure white variety. The flowers make fine cut flowers as the stems are long. Pkt., 10c.

1712 Giant Mixed Daisies—This assortment includes the Giant Longfellow, Giant Snowball and Giant Red, as well as many other finest sorts. Pkt., 10c.

1713 Double White—A very fine white variety. Pkt., 5c.

1714 Double Rose—Clear rose pink. Pkt., 5c.

1715 Fine Double Mixed—A very choice mixture. Pkt., 5c.

Foxglove (Digitalis)

Delphinium

Hardy Perennial Larkspur—One of our most brilliant and effective hardy garden plants. Of late years the size and colors of the flowers have been wonderfully improved. Persistent bloomers, even in the driest seasons, 2 to 4 feet.

1726 New Giant Flowering Hybrids—These magnificent hybrids, the grandest of Delphiniums in existence, produce splendid spikes of immense flowers, semi-double and double. Flower spikes are from 2 to 5 feet in length. The colors are very beautiful, ranging from pure white through all the shades of lavender and blue. Mixed colors. Pkt., 20c.

1732 Formosum—Elegant spikes of the richest dark-blue flowers, with a white center; especially fine for cutting. Four feet. Pkt., 5c.

1733 Formosum Coelestrinum—Light sky-blue flowers, with darker centers; a very fine variety. 4 feet. Pkt., 10c.

1735 Zaili—The splendid spikes of bloom are a lovely shade of sulphur-yellow. 4 feet. Pkt., 10c.

Annual Delphiniums. See Larkspur, page 91.

Mrs. Mary A. Love, Buchanan Co., Iowa, writes: "I have planted your seed ever since 1875. They are so reliable, I am afraid to use others. You sent me two catalogues. I gave them to my neighbors. I know they will send to you for seeds."

J. J. Anderson, of Lake Co., Ohio, writes: "It is a pleasure to me to state that during my several years' dealing with you I have had no cause to complain as to your stock or your prompt and courteous manner of doing business."

Delphinium Giant Flowering Hybrids

Digitalis (Foxglove, or Witches Fingers)

The Foxglove, in common with all the hardy perennials, is being planted more extensively each season. The large tube-like flowers, which are produced so freely in beautiful spikes, add much to our hardy beds and borders. Being of the easiest growth, and doing finely in partially shaded situations, they fill in many gaps most advantageously. 3 feet.

1732 Gloxiniaeflora—A beautiful class, with spotted flowers. We offer a mixture of the finest varieties. Pkt., 5c.; 1/4 oz., 20c.

1734 Grandiflora—A variety that grows about 2 feet in height. A very fine yellow in color. Pkt., 5c.; 1/4 oz., 20c.

1736 Monstrosa (Mammoth Foxglove)—A grand strain. The top flowers of the spikes are of enormous size. Our assortment of colors is very fine. Splendid mixed. Pkt., 5c.; 1/4 oz., 35c.

1738 Purpurea, Finest Mixed—This is the common Foxglove so generally known. Contains many fine varieties. Pkt., 5c.; 1/4 oz., 20c.

Datura (Trumpet Flower)

Very attractive, bushy plants of easy growth, that during the whole season are covered with elegant, fragrant, trumpet-shaped flowers. Hardy annual. 3 feet.

1720 Cornucopia (Horn of Plenty)—A magnificent variety. The blooms average 8 inches long by 5 inches across; the color is white inside, while the outside is most beautifully marbled with royal purple. Pkt., 5c.; 1/4 oz., 20c.

1722 Finest Double Mixed—A very choice assortment of all the best colors and varieties of this effective annual. Pkt., 5c.

Livingston's Mixture of Hardy Garden Pinks

Double Annual Pinks

1740 New Giant Fringed and Ruffled Pinks, Double Marvellous or Japanese Fringed Pinks (Mirabilis Fl. Pl.)—This remarkable and perfectly distinct new strain produces large, perfectly double flowers on stiff, upright stems. The petals are deeply cut into fine strips of thread-like fringes for about half their length, and are twisted in all directions, presenting a novel aspect. In color, they vary greatly, having all shades from pure white to deep purplish-red. Pkt., 15c.; 2 pkts., 25c.

1744 Laciniatus (Double Fringed Pinks)—Magnificent flowers; very large; double. Mixed colors; striped and fringed edges. Pkt., 5c.; ¼ oz., 25c.

1746 Heddwigi (Double Japan Pink)—Flowers very large; perfectly double; many elegant colors and shades, from delicate rose to richest crimson. Pkt., 5c.; ¼ oz., 20c.

1752 Imperialis (Double Imperial Pink)—Charming varieties of these popular pinks. Our mixture includes a great number of colors. Pkt., 5c.

1754 Snowball—Double white, fringed flowers; fine variety. Pkt., 5c.

1756 Fireball—A brilliant dark scarlet; plants grow dwarf and bushy; is very fine for bedding or cut flowers. Pkt., 5c.; ¼ oz., 25c.

1758 Chinensis (China or India Pink)—Our mixture includes all best colors and shades. Pkt., 5c.; ¼ oz., 15c.; oz., 50c.

1760 Livingston's Mixture of Double Pinks—A splendid combination of all the best varieties. Pkt., 5c.; ¼ oz., 25c.

Dolichos

(Hyacinth Bean)

A splendid annual climber, with hyacinth-like clusters of purple and white flowers, which are followed by exceedingly ornamental seed pods. Is of most rapid growth and stands Summer heat well. Sow the seeds in the garden in May where the plants are to remain.

1796 New White Bush Dolichos—Strong, healthy plants, 18-30 inches tall, according to soil, carry an abundance of elegant flower spikes, 12 to 16 inches long, well above the foliage. Individual flowers measure about an inch across and resemble a pea flower. As the lowest flowers on stalks drop off, they are followed by ornamental creamy-white seed pods. Bush Dolichos succeed anywhere, are highly ornamental planted singly or in rows and bloom continuously from middle of July until frost. Pkt., 10c.

1790 "Daylight"—A splendid variety from Japan. Large snow-white Wis-taria-like racemes, that are most fragrant, followed by attractive silver-white seed pods. A very showy and rapid-growing sort. Pkt., 5c.; ½ oz., 15c.

1792 Purple Soudan—A most decorative climber. The twining stems are of the most intense purple, which the beautiful spikes of bloom are of the richest shade of brilliant rose. Pkt., 5c.; ½ oz., 10c.

1794 Finest Mixed—Very choice mixture of all the best climbing varieties. Pkt., 5c.; ½ oz., 10c.; oz., 15c.; ¼ lb., 50c.

"True Blue" Flower Seeds

given uniformly best satisfaction. We test hundreds of varieties every year in our trial grounds, and know that you cannot buy better flower seeds, no matter where you buy or what you pay.

Dianthus or Pinks

This elegant fall contains many of the most valuable and popular flowers in cultivation. All the sorts classed as annuals may be sown directly in the garden as soon as danger from frost is past, and will in a short time become a mass of bloom, and so remain all Summer. Elegant as cut flowers for bouquets, as the stems are good. Grow about 1 foot high, and are of easiest culture.

Hardy Garden or Clove Pinks

This splendid class of hardy perennial Pinks should be in all gardens. They have the delightful clove fragrance.

1778 New Double Large-Flowering Grass, or Spice Pinks (Plumarius semperflorens, Fl. Pl.)—One foot high. The flowers, which are beautifully fringed, are much larger and more double than the old varieties, while the colors are far richer, including a large variety of colors and markings not known to the old-fashioned Pinks. Many are exquisitely spotted and splashed. They emit a delightful, sweet-scented, spicy odor. Perfectly hardy, requiring only the ordinary culture of the Pinks. They increase in size and beauty every year. Bloom profusely during the Spring and early Summer. Pkt., 25c.

1772 New Single Large-Flowering Grass, or Spice Pink, Mixed—Same as above, only single. Pkt., 5c.

1773 Plumarius (Pheasant's Eye Pink)—A single hardy Pink; fringed edge, white flowers with dark centers. Pkt., 5c.

1774 Double Clove Pink (Plumarius flore pleno)—Double and semi-double varieties. Many colors; of strong clove fragrance. Pkt., 10c.

1776 Cyclops Hybrids—Superb, double-flowering red and scarlet varieties; very fragrant. Pkt., 5c.

1777 Livingston's Mixture of Hardy Garden Pinks—A magnificent strain of hardy garden pinks containing all the sorts described on this page and many new varieties not listed by us. Choicest single and double sorts of bright and brilliant colors make this mixture one of the most desirable for the hardy garden. Pkt., 10c.; 3 pkts., 25c.; ½ oz., 50c.

Dimorphotheca Aurentiaca

1718 Golden Orange Daisy—One of the newer annuals

from South Africa. Grows 10-12 inches high, with pretty daisy-like flowers. Orange-yellow. Pkt., 10c.

African Golden-Orange Daisy

Eschscholtzia

(California Poppies)

Most attractive annuals of the easiest culture, their flowers being very bright and showy. They are splendid for bedding, massing or ribbon-work. The plants grow bushy and about one foot high. They are favorites everywhere. Bloom profusely from Spring sown seed. (See illustration.)

1804 "The Golden West"—Early and continuous bloomer. Magnificent flowers of gigantic size. Color intense shining yellow and orange. The state flower of California. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.

1806 Finest, Double Mixed—A splendid assortment of colors. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.; oz., 50c.

1808 Finest Single Mixed—All the best varieties. Pkt., 5c.; oz., 25c.

1811 Bush Eschscholtzia (Hunnemannia)—A fine new perennial plant; forms a bushy shrub 2 feet high, producing large cup-shaped flowers on stems 12 inches long; of clear jonquil yellow and vivid bright orange stamens. Begins to bloom in July from Spring-sown seed. Pkt., 5c.

Fuchsias**Echeveria (Hen and Chickens)**

These plants are easily grown from seeds. Our mixture contains a great variety, both in shapes and colorings.

1797 Mixed—Pkt., 10c.

Erigeron Speciosa

1770—Hardy perennial, bearing pretty blue flowers for a long period. Grows about two feet high. Useful in hardy border. Pkt., 10c.

Feverfew (Matricaria)

1824—Free-flowering annuals about one foot high; very compact and bushy. Splendid for beds and borders; also fine as cut flowers or for pots. The double, white blooms are very useful in bouquets. Pkt., 10c.

Fuchsias (Lady's Eardrops)

These well-known plants will flower the first season from seed, if started early. As house plants for Winter they are always general favorites. The seed we offer is saved from a fine collection of double and single sorts.

1826 Best Sorts Mixed—Pkt., 15c.

Four O'Clock—Marvel of Peru, page 91.

Forget-Me-Not—See *Myosotis*, page 94.

Gaillardia (Blanket Flower)

There are Annual and Perennial Gaillardias. The Annual sorts bloom all Summer and Autumn, and are noted for the profusion, size and brilliancy of their flowers; excellent for beds and borders. The Perennial varieties are grand and wonderfully effective in the hardy borders, their especial value being constant blooming from July until hard freezing weather. They require no Winter protection, although applications of manure increase their strength. If the seed is sown early they will begin flowering at mid-Summer. Both classes are splendid as cut flowers. They are of the easiest culture, doing finely anywhere. Height 2 feet.

1830 Finest Single Annual Mixed—A very fine assortment of many brilliant colors. Pkt., 5c.

1832 Finest Double Annual Mixed (Lorenziana)—All the best double-flowering varieties in richest mixture. They bloom freely all the season. Splendid for bouquets. Pkt., 5c.

1834 Grandiflora Hybrids, Finest Mixed—One of the most elegant perennials; is in continuous bloom from June until frost. The enormous flowers are a magnificent combination of red and yellow. Splendid to cut for vases. Pkt., 5c.

1836 Grandiflora Compacta—A compact-growing variety similar in bloom to the Grandiflora Hybrids, but only grows about 15 inches high. Its flowers are of the richest colors, and the stems are long. A very fine variety. Pkt., 5c.

"True Blue" Seeds

are steadily gaining in popular favor because: We fill the orders promptly! The seeds we send grow and please the customers. We treat our customers courteously and help with suggestions, leaflets, etc., to make their work a success. Our flower seeds are from the very best growers and we are sure will give you the very best results. Please do not overlook our Giant Nasturtium Collection on p. 94. Also our Sweet Pea Collections on pp. 102-103.

Gaillardia Grandiflora

Hibiscus

Hibiscus (Marshmallow)

Tall growing; especially adapted to backgrounds and shrubbery borders. Of easiest culture, and bloom the entire season. Plants grow 4 to 5 feet tall.

1890 Africanus—A very choice annual variety. Flowers yellow, with maroon center. Pkt., 5c.

1892 Crimson Eye—The beautiful white flowers, with deep crimson centers, are of immense size, often 6 to 7 inches in diameter. Perfectly hardy. Pkt., 5c.

1894 Mallow Marvels—A robust type of upright habit, producing an abundance of flowers of enormous size in all the richest shades of crimson, pink and white. **Mixed colors**.....Pkt., 10c.

Heliotrope

Easily raised from seeds, Spring planting giving fine Summer blooming plants. As a bouquet flower always a favorite.

1880 Lemoine's Giant Hybrids—Grand flowers, double the size of the older sorts. Bushes compact, about 18 inches high; heads of mammoth blossoms often measure a foot across. Deliciously fragrant. Seed sown in the Spring will produce flowering plants by July, which continue in flower until frost. Mixed, including purple, white, lavender and blue. Pkt., 10c.

1882 Dark Varieties Mixed—All best dark blue and lavender shades in mixture. Pkt., 5c.

1884 All Sorts Mixed—In best assortment; all shades, both light and dark. A very desirable strain. Pkt., 5c.

Hardy Garden Heliotrope—See Valeriana.

Godetia (Satin Flower)

An attractive and very beautiful hardy annual. In full bloom all Summer, so profuse that the foliage is almost hidden by the large wide-open flowers; of shining satiny texture and the most delicate and brilliant colors. Our mixture contains all the best varieties. 1½ feet. **1854 Mixed**—Pkt., 5c.

Gourds

1862 Bath-Sponge, or Dish Cloth—A most admirable natural dish cloth is furnished by the peculiar sponge-like lining of this fruit. Pkt., 5c.; ½ oz., 20c.; oz., 35c.

1865 Dipper—Used for dippers; 9 to 12 inches long; hold from 1 to 4 pints; will last for years. Pkt., 5c.; oz., 25c.

1868 Japanese Nest Egg—Exactly like a hen's egg in shape, color and size. Pkt., 5c.; ½ oz., 15c.; oz., 25c.

1871 Snake, or Serpent—Has long fruits, sometimes 5 feet, and striped like a serpent. Pkt., 10c; 3 pkts., 25c.

1872 Sugar Trough—Holds 4 to 10 gallons; hard, thick shells; very light, strong and durable. Pkt., 5c.; oz., 25c.

1860 Gourd Mixture—Contains all of the above mentioned sorts. Pkt., 5c.; oz., 20c.

Gypsophila Paniculata (Baby's Breath)

An elegant hardy perennial plant that should be in every garden. It is not only pretty in beds, but its delicate little flowers, produced in feathery white panicles, and branching foliage lend a daintiness to bouquets that is most elegant. Its sprays are much used in making up bouquets of Sweet Peas. **1878**—Pkt., 5c.

Geraniums

These popular plants are most easily raised from seed, and if started early will produce flowering plants the first Summer. Start in the house and transplant to the garden as soon as the weather is warm. You will find that the varieties we offer are of very superior quality.

1842 Finest Mixed—Pkt., 10c.

1843 Large-Flowering Double Varieties—Splendid strain; seed is saved from the finest double sorts. Pkt., 25c.

1844 Variegated-Leaved Sorts—Bronze, gold, silver and tri-colored foliated varieties. Elegant collection. Pkt., 15c.

1845 Lady Washington—These are the well-known rich-colored showy Pelargoniums. Our mixture includes all the best varieties. Pkt., 20c.

1846 Apple-Scented—The old-fashioned favorite apple-scented Geranium. Pkt., 10c.

Helichrysum (Straw Flower)

A hardy annual of the easiest culture; one of our best "Everlasting" flowers, the dried double bloom being very handsome in Winter bouquets. 2 feet. **1888 Mixed**—Pkt., 5c.; ¼ oz., 20c.

Mr. Charles Adams, Fayette Co., Ind., writes: "The package of Lawn Seed and Flower Seed you mailed us arrived all O. K., and we feel that we now have seed that will make us successful."

Heliotrope. Pkt., 10c.

Hollyhocks

Hollyhocks require a rich soil, but it must be well drained. We give especial attention to this flower, and you will find our strains of seed of the finest quality. Once thoroughly established, they bloom stronger and more brilliantly every year. Seeds sown early, and the young plants transplanted several times, will bloom the same season; July and August sown seed, following year. 5 to 8 feet.

Livingston's Prize Hollyhocks

These are the largest flowering and most perfectly double Hollyhocks we have been able to procure after many years of selection of only the best varieties. The colors are rich and brilliant, the plants free from disease, as well as very robust and strong growers; in fact, we believe our strain to be unsurpassed in every respect. We offer several separate colors and our best mixture.

1896 Double Black. Pkt., 10c.	1900 Double Rose Pink. Pkt., 10c.
1897 Double Lemon Yellow. Pkt., 10c.	1901 Double Crimson. Pkt., 10c.
1898 Double White. Pkt., 10c.	1904 Double Scarlet. Pkt., 10c.
	1905 Double Salmon. Pkt., 10c.

Livingston's Prize Mixture

This is our best mixture. It is composed exclusively of the finest double-flowering varieties. It contains not only the above elegant colors, but also innumerable other shades. 1908—Pkt., 10c.; $\frac{1}{4}$ oz., 25c.

Mammoth Allegheny

Attractive variety. Its lovely arranged, fringed and transparent petals look as if they were made from the finest China silk. The individual flowers are enormous in size, and in color they range from the palest pink to deepest red red. In form the flowers are double, semi-double and single. Plants are in full bloom from July until frost. 1910—Pkt., 10c.; $\frac{1}{4}$ oz., 30c.

New Annual Everblooming Hollyhocks

These glorious new hybrids may be grown from seeds and will flower the same year as quickly as any garden annual. The plants can be treated as annuals. The seeds may be started in the house, or in hot-beds, frames, etc., in March or April. Plants transplanted by the beginning of May in the open ground will commence to flower about end of July, ten days after Hollyhocks that have been treated as biennials. 1913 Mixed Annual Hollyhocks—Pkt., 10c.; $\frac{1}{2}$ oz., 40c.

Ice Plant

(Mesembryanthemum)

A very pretty trailing annual that has fleshy, wax-like leaves, which have the appearance of being covered with ice crystals. Splendid for rock-work, vases or hanging baskets. Flowers are white. Start seed in the house. 1925—Pkt., 5c.

Kenilworth Ivy

1932 Linaria Cymbalaria—A hardy perennial trailing plant suitable for vases, etc. Adapted to shady locations. Easily grown from seed. Lovely little lavender and purple flowers and an exquisite foliage. Pkt., 10c.

Kochia
Tricophylla
in our trial
grounds.
It makes a beautiful
and symmetrical hedge.

Livingston's Prize Hollyhocks. Pkt., 10c.

Humulus (Japanese Hop)

Splendid climber. Has handsome foliage, which resembles that of the Common Hop Vine. Never suffers from heat or attack of insects; easiest culture.

1920 Japonicus—Has bright green foliage. Pkt., 5c.

1922 Silver-Leaf Japanese Hop—Unusually beautiful variety of rapid-growing Summer climbing vine. Leaves deep green, beautifully striped and blotched with silvery white and gray. Will reach a height of 20 to 30 feet in three or four weeks' time. Pkt., 5c.; $\frac{1}{2}$ oz., 15c.

Impatiens

(Zanzibar Balsam)

A very pretty plant, for house culture, and the garden as well. Its flowers are very rich colored. They are borne in great abundance, and the plants are continuous bloomers. Tender perennial. 2 feet. 1928—Pkt., 10c.

Holstii Hybrids

Very handsome Zanzibar Balsam discovered in Africa. It forms bushes $1\frac{1}{2}$ to 2 feet high and resembles above, but surpasses it in its quicker and more vigorous growth, and its larger and brighter colored flowers. Seed sown indoors in Spring will form plants ready to set out in May. 1930—Mixed—Pkt., 15c.

Kudzu Vine

1936 Pneraria Thunbergiana—This wonderful climber is of Japanese origin and is the most luxuriant and rapid-growing vine known in horticulture. It will grow 8 to 10 feet the first year from seed, and after becoming established will produce vines 50 feet high in a season, sometimes growing 12 inches in a single day. Produces a tuberous root which is perfectly hardy everywhere. Foliage is very luxuriant, quickly forming a dense shade. Unequaled for porches, arbors, trellises, etc. Pkt., 10c.; 3 pkts., 25c.

Kochia Tricophylla

1934 Summer Cypress, or Burning Bush—This splendid annual plant grows very quickly from seed sown in the open ground as soon as the weather permits in Spring. The plants always make attractive globe-shaped bushes, as large sometimes as 3 feet high and 2 feet across in one season. Leaves slender and of a light peagreen color until September, when they turn to carmine and blood-red; at the same time the ends of the shoots are thickly set with small bright scarlet flowers and produce a very striking effect. Pkt., 10c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.

Lantana

Popular, free-blooming and very rapid-growing plants with flower heads of various colors, which are continually changing; emit a powerful aromatic perfume, plants are completely loaded with blossoms, succeeded by berries, which, when ripe, turn deep blue. Used largely for bedding out in Summer and are also fine Winter-blooming plants. Start seeds in the house or hot-bed. Tender perennial. 1½ feet. 1938 **Mixed**—Pkt., 5c.; ¼ oz., 15c.

Larkspurs

(Annual Delphinium)

1945 **Azure Fairy**—Annual variety of Larkspur and a most beautiful shade of blue. It grows about 12 inches high and is covered with flowers for a long period. It is very hardy and satisfactory in every way. Pkt., 15c.

1944 **Stock-Flowered Larkspur**—These tall-growing and branching Larkspurs produce the most brilliantly beautiful spikes of double flowers; continuously in bloom all Summer. All colors mixed. Pkt., 5c.

1947 **Dwarf Hyacinth-Flowered**—Resembles a Dutch Hyacinth in style of bloom. Our mixture includes a very fine range of colors and shades. Pkt., 5c.; ¼ oz., 25c.

1949 **Giant Hyacinth Flowered**—Tall, a superb class. The splendid flowers are very large, very double and of various beautiful colors, shadings and markings; long spikes of bloom like immense Hyacinths. Pkt., 10c.; ¼ oz., 30c.

1951 **Double Dwarf Rocket**—A most choice mixture of varieties, that grow about 1 foot in height. Pkt., 5c.; ½ oz., 15c.

1953 **Double Tall Rocket**—This well-known mixture embraces the very choicest colors in the taller growing sorts. Pkt., 5c.; ½ oz., 15c.

Perennial Larkspur—See **Delphinium**.

Lavender

(*Lavendula vera*) **True Lavender**—Popular sweet-scented hardy perennial, fine for mixed border. 3 feet. 1957—Pkt., 5c.

Lobelia

Exceedingly pretty, profuse blooming plants of great value both in the garden and for hanging-baskets, window boxes and vases, especially prized for edgings of beds and borders. Plants grow about 6 inches high. They are treated as annuals and are of the easiest culture.

1958 **Crystal Palace Compacta**—Best dark blue sort for edgings and carpet bedding. Pkt., 10c.; ¼ oz., 50c.

1960 **Emperor William**—A brilliant, compact-growing light blue; a very fine variety. Pkt., 5c.

1962 **Gracilis**—Fine for hanging-baskets, vases and window boxes. Light blue, a trailing variety. Pkt., 5c.

1964 **Mixed Compacta Sorts**—A very fine mixture of all the best varieties for edgings and bedding. Pkt., 5c.

Lychnis

Few plants produce as bright flowers and bloom as continuously as Lychnis. A hardy perennial, but flowers the first season from seed if same is sown early. 2 feet.

1971 **Finest Mixed Hybrids**—Plants are compact and bushy; colors include all the most brilliant shades, from pure white to deepest red. Pkt., 5c.

Four O'clock

Larkspur

Marvel of Peru (Four O'clock or Mirabilis)

This old-fashioned favorite is one of our easiest grown annuals. The plants are bushy, about 2 feet high, and completely covered all Summer with large, showy, very fragrant blooms.

1995 **Variegated**—The brilliant flowers, in many colors, contrast finely with the golden-hued foliage. Pkt., 5c.; oz., 20c.

1997 **Finest Mixed**—An elegant assortment of these old-fashioned favorites. Pkt., 5c.; oz., 15c.; ¼ lb., 45c.

Maurandya

Elegant twining, climbing plants, with handsome foliage and flowers. They bloom profusely all summer in the garden, and are also particularly adapted for the house and conservatory. 1999 **Blue, White and Mauve, Mixed**—Pkt., 10c.

Mimulus (Monkey Flowers)

Very showy and free-blooming plants, having brilliant and greatly varied blooms. Fine for pots, or in the garden. They do best in rather shaded, moist situations. 1 foot.

2018 **Tigrinus**—Striped and spotted varieties; very fine. Pkt., 10c.

2020 **Moschatus (Musk Plant)**—Fine for hanging baskets, etc. Small yellow flowers. The foliage has a strong odor of musk. Pkt., 5c.

Livingston's Superb Marigolds

These old-fashioned favorites are annuals of the very easiest cultivation. Both the French and African classes are very effective; the former have the small, velvety flowers, in pretty combinations of yellow, brown, maroon and striped effects; the African sorts are the enormous flowered ones, in very showy orange and lemon shades. (See illustration.) Both kinds are most popular for beds and borders, and planted in large blocks are very attractive. They bloom profusely all Summer. Start the seed early in a box in the house, or plant directly in the garden when the weather is warm. Fine as cut-flowers. French sorts make nice pot plants.

African Marigolds

1974 Mammoth Lemon Queen—Flowers very large; rich lemon color; double. 3 feet. Pkt., 5c.; $\frac{1}{4}$ oz., 25c.

1976 Mammoth Orange Prince—Enormous double blooms, of an intense, very striking orange. 3 feet. Pkt., 5c.; $\frac{1}{4}$ oz., 25c.

1978 Mammoth Tall Mixed—A splendid assortment of all the best shades in African Marigolds. 3 feet. Pkt., 5c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.

1980 Mammoth Dwarf Mixed—The flowers are enormous in size, but the plants grow much dwarfer. 1 $\frac{1}{2}$ feet. Pkt., 5c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.

French Marigolds

1984 Legion of Honor (Little Brownie)—Handsome single variety, covered with a multitude of flowers. In color it is a velvety golden yellow blotched with purple. 1 foot. Pkt., 5c.; $\frac{1}{4}$ oz., 20c.

1988 Tall Double Mixed—A splendid assortment of all the best colors in striking combinations. 2 $\frac{1}{2}$ feet. Pkt., 5c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.

1990 Dwarf Double Mixed—Similar mixture to No. 1980 in colors, but the plants grow much dwarfer. 1 foot. Pkt., 5c.; $\frac{1}{2}$ oz., 25c.; oz., 40c.

Livingston's "True Blue" Flower Seeds

are grown for us by specialists who have had years of experience, and are situated where the climate is best suited to their perfect development. You will take little risk in using them.

Livingston's Superb African Marigolds. Pkt., 5c.

Mignonette (Reseda)

Without Mignonette in our gardens, something indeed would be missing. Its large, deliciously fragrant spikes of bloom are everyone's admiration. Make successive sowings in the garden, from April to July, for continuous bloom until frost; and if the plants are thinned out to six inches apart, and the tops pinched off when about two inches high, stronger plants, with larger spikes of elegant bloom, will be the result. Height 1 to 2 feet, according to the variety.

2001 Mammoth Red Goliath (See Illustration)—This is the ideal mignonette for garden or pot culture. Of strong stocky growth, luxuriant rich green foliage. Branching habit; dense in length and 2 $\frac{1}{2}$ inches in diameter. Surpasses all others in brilliancy of color. Strong, delightful fragrance. Pkt., 10c.; $\frac{1}{4}$ oz., 35c.

2005 Machet—A very fine variety, especially for growing in pots; has large, fragrant spikes of reddish bloom. Pkt., 5c.; $\frac{1}{4}$ oz., 20c.; $\frac{1}{2}$ oz., 35c.

2006 Golden Machet—A distinct variety of the above, having golden-yellow flower spikes. Very sweet and elegant. Pkt., 10c.; $\frac{1}{4}$ oz., 20c.

2007 Defiance—Has immense spikes of bloom. Keeps long time after being cut, and very fragrant. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.

2008 Victoria Red—An elegant sort; fine flower-spikes of the most brilliant dark-red, very sweet. Pkt., 5c.; $\frac{1}{4}$ oz., 20c.; $\frac{1}{2}$ oz., 35c.

2009 Golden Queen—A very compact-growing sort; flower spikes golden yellow. Fragrant and fine. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.

2010 Parson's White—A robust grower, bearing large spikes of bloom; pure white and very fragrant. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.

2011 Sweet Mignonette (Reseda Odorata)—The old fashioned, deliciously sweet scented variety. Pkt., 5c.; oz., 15c.

2016 Finest Mixed Varieties—An elegant mixture of above fine varieties, and many other choice sorts. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.; $\frac{1}{2}$ oz., 25c.

Mammoth Red Goliath Mignonette. Pkt., 10c.

Moonflowers

(*Ipomoea Noctiflora*—See Illustration Below)

Splendid annual climbers of most rapid growth, with beautiful and varied flowers; for covering old walls, trellises, arbors or stumps of trees, they are valuable. The seed should be lightly cut at the end and soaked over night before planting.

2038 Northern Light—The earliest blooming of all the Moonflowers. Its lovely pink flowers are produced by the thousands, all Summer and Fall. Pkt., 10c.

2040 Moonflower, White-Seeded—The variety most generally grown, being large in flower, firm in texture, and very fragrant. It bears in greatest profusion its immense lovely white flowers, 5 to 6 inches in diameter, with a 5-pointed star in the center. Pkt., 10c.

2042 Moonflower, Cross-Bred or Hybrid—A variety of great value for the North, as it is in bloom a month earlier than the above. Flowers are pure white, large and fragrant. A very rapid grower; 20 to 40 feet. Pkt., 10c.

2046 Ipomoea Rubro—Coerulea (Heavenly Blue)—The popular climber; has immense blooms of bright sky-blue. Very fine sort. Pkt., 10c.

One pkt. of each of above 4 Moonflowers, 30c.

Morning Glories

2024—Giant Imperial Japanese—One of the most valuable and popular annual climbers introduced in years. This strain of mammoth-flowering Morning Glories is most justly celebrated for the beauty of both flowers and foliage. Magnificent in size of bloom—4 to 6 inches across. The great variety of rich and delicate colors, tints and markings is wonderful. Our mixture of seed of these is superb. Pkt., 10c.; ½ oz., 15c.; oz., 25c.; 4 oz., 75c.

2026 Finest Mixed Japanese—Very choice strain; flowers large, and in greatest variety of colors and shades. Pkt., 10c.; oz., 15c.

2028 Fancy Fringed Japanese—This is a splendid mixture, made up exclusively from the best fringed varieties. The range of color is very great and the fringed-edged blooms very beautiful. Pkt., 10c.; ½ oz., 25c.; oz., 35c.

2022 Morning Glories (Convolvulus Major)—These are the old-fashioned favorites that everybody loves. No climber is more useful, as they grow so quickly and cling to anything. Splendid mixed with other vines, especially Nasturtiums. Our mixture contains all the choicest and brightest colored sorts. Pkt., 5c.; oz., 10c.; ¼ lb., 25c.; lb., 75c.

2030 Brazilian Morning Glories (Ipomoea Setosa)—This desirable climber makes a thick, dense growth of great lobed leaves, and is brilliant with an endless profusion of immense clusters of rosy-colored flowers, with a satiny-pink star in the center of each. Pkt., 10c.

Dwarf, or Bedding Morning Glories

Beautiful and showy plants, producing an abundance of richly colored flowers, which, in fine weather, remain open all day. Hardy annual. 1 foot.

2036 Choice Mixed—A very large assortment of these richly colored favorites. Pkt., 5c.; oz., 15c.

R. Blickenderfer, Laclede Co., Mo., writes: "Enclosed find 25c. for your seven varieties of Sweet Peas, Spencer variety. Those we received from you last year did extra fine; they were without doubt the finest in the city."

Mr. Floyd H. Ferrell, Hocking Co., Ohio, writes: "I have had good success with your seeds last year and I think they are surely True Blue seeds indeed."

Cardinal Climber

New Cardinal Climber

(*Ipomoea Qnamoclit Hybrida*)

A new annual climber of the *Ipomoea* or Morning Glory family.

It is a wonderfully vigorous grower, climbing 20 feet in a season from seed sown in the Spring. The foliage is beautifully cut and is very graceful. The flowers are very brilliant, being a fiery scarlet, the individual blooms being about 1½ inches across and produced in clusters of 5 to 7. It flowers very profusely the entire Summer, and bids fair to take a place as one of our best annual climbers, having attracted much attention wherever grown. It should be planted in a warm, sunny location in good soil and will then give a good account of itself. 1598—Pkt., 15c.

Pkt., 5c.; ½

GIANT JAPANESE
MORNING GLORIES

Myosotis (Forget-Me-Nots)

The Forget-Me-Not is an old favorite, bearing clusters of star-shaped flowers. Succeeds best in a moist, shady situation, and blooms the first year from seed sown early. Seed sown in Autumn flowers in early Spring. Hardy perennial. **2050 Palustris (True Forget-Me-Not)**—Beautiful blue; 6 inches. Pkt., 10c.; $\frac{1}{4}$ oz., 30c.

2051 Alpestris—Bright blue. Pkt., 5c.

2054 Semperflorens—Splendid dwarf Forget-Me-Not; will thrive in sun or shade; covered from early to late with beautiful blue flowers. Pkt., 5c.

2058 Finest Mixed Varieties—A Forget-Me-Not Mixture of all the finest sorts. Pkt., 5c.

Livingston's Giant-Flowering Tall Nasturtiums

Giant Golden Yellow—Mammoth flowers, frequently $3\frac{1}{2}$ inches in diameter; borne on long, strong stems well above the foliage; exquisitely formed with overlapping crinkled petals of a rich golden yellow. Strong, vigorous grower; large, bright green leaves. A grand and distinct variety. **2066**—Pkt., 5c.; oz., 20c.

Giant Cream Pink—The extremely large flowers are of full expanded form; the daintiest of all Nasturtiums. Its superb coloring is of bluish cream, flushed with rose. Nothing we can say can convey an idea of its fairy-like beauty, mammoth size and splendid substance. **2068**—Pkt., 5c.; oz., 20c.

Giant Deep Crimson—The deepest and richest of all dark-red Nasturtiums. The foliage is dark green; the mammoth flowers, which are borne in great abundance, have a soft, velvety texture; slightly crumpled petals and wonderfully rich coloring. **2070**—Pkt., 5c.; oz., 20c.

Giant Striped Hybrids—A gorgeous strain of brilliantly striped beauties of various shades and tints; gigantic in size. Its wonderful variety of colors and markings show many unique combinations. **2071**—Pkt., 5c.; oz., 20c.

Giant Brilliant Scarlet—A glowing, flaming scarlet, intense and vivid; the largest of its color; of splendid substance and beautiful form. **2072**—Pkt., 5c.; oz., 20c.

Giant Lemon and Rose—Grand, extra large flowers of clear pale lemon, varying to bright yellow; beautifully blotched with bronzy crimson. **2069**—Pkt., 5c.; oz., 20c.

Giant Rose—A most desirable variety, with flowers of a soft rosy-pink color; foliage light green. The brightest rose-color Nasturtium we have ever seen. Abundant bloomer. **2067**—Pkt., 5c.; oz., 20c.

Rainbow Collection of Giant-Flowering Nasturtiums

7 LARGE PACKETS of these
Wonderfully Beautiful Kinds,
postpaid, to any address, for **25c**

Livingston's Top-Notch Mixture

A wonderful diversity of rich colors and new and striking combinations are found in this unequaled mixture. A row in full bloom is beyond description, containing shades of yellow, rose, scarlet, orange, lemon, bronze, maroon, ruby, cream and pink, both in solid colors and mottled and striped in many showy and exquisite ways. For many years this mixture of Nasturtiums has been our special pride. Every year we have improved it, until now we unhesitatingly offer our new Giant-Flowering Nasturtiums as absolutely the finest. We strongly recommend our customers to plant liberally.

2100 Top Notch Mixture of New Giant-Flowering Nasturtiums—A large packet, 10c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.

2094 Mixed Tall Nasturtiums—There is no flower of which you need seed in larger quantities for liberal planting than Tall or Climbing Nasturtiums. For the low price, this mixture is very choice. Pkt., 5c.; oz., 10c.; $\frac{1}{4}$ lb., 20c.

Ivy-Leaved Trailing Nasturtium

This is a most distinct variety, both in flower and foliage. The plants are of very sturdy, running growth, and the leaves, which are of a deep green, veined with silvery-white and star-like, resemble the hardy English Ivy. The flowers are intense glowing scarlet and most distinct in form, the petals being finely feathered. Especially graceful in hanging baskets, window boxes and vases

2101 Scarlet—Pkt., 10c.; $\frac{1}{4}$ oz., 20c.; oz., 30c.

Specimen Flowers from Livingston's Top-Notch Mixture

Madame Gunther Hybrid Climbing Nasturtiums

These are of French origin, and for rich and striking colors the not surpassed by any class of climbing Nasturtiums. Very fine.

2076 Tall French Chameleon—This variety produces blooms of many distinct colorings upon the same plant. Pkt., 5c.; oz., 15c.

2077 Dark Crimson—Splendid variety; fine foliage. Pkt., 5c.; oz., 10c.

2081 Jupiter—Giant-flowered. Color a deep, very clear, golden yellow, of the strongest growth; profuse bloomer. Pkt., 5c.; oz., 15c.

2082 Tall King Theodore—Deep crimson-maroon, so velvety that it is almost black; has dark foliage. One of the best sorts. Pkt., 5c.; oz., 15c.

2096 Mixed Colors—Pkt., 5c.; oz., 15c.; ¼ lb., 50c.

Lobb's Climbing Nasturtiums

(*Tropaeolum Lobbianum*)—Both foliage and flowers of this class are somewhat smaller than the Tall varieties, but the splendid profusion of bloom and the intensely brilliant colors of the flowers render them of the greatest value. 12 to 15 feet.

2083 Tall Pearl—Nearly white. Pkt., 5c.; oz., 10c.

2084 Regelianum—Deep purplish violet. Pkt., 5c.; oz., 10c.

2086 Scarlet—Bright; good foliage. Pkt., 5c.; oz., 10c.

2095 Lobb's Finest Mixed—This elegant assortment of Lobb's Climbing Nasturtiums is composed of the most brilliant colors in this class. Pkt., 5c.; oz., 10c.; ¼ lb., 30c.

New Fringed Nasturtiums

A decidedly novel and distinct new Nasturtium, with magnificent large flowers, deeply fringed. Climbing variety, reaching a height of 10 to 12 feet. Deep green foliage. A unique and beautiful variety.

2104 Mixed Colors—Pkt., 10c.

Marble-Leaved Queen

2110 Mixed—A beautiful variety and a new type, having leaves marbled, striped and blotched with white, yellow and green. Many colors mixed. Pkt., 5c.; oz., 25c.

Dwarf Nasturtiums

2135 Golden King—A rich orange-yellow. Foliage dark. Pkt., 5c.; oz., 15c.

2136 King of Tom Thumbs—Glowing, darkest scarlet flowers. Foliage very dark green. A most rich and brilliant variety. Pkt., 5c.; oz., 15c.

2137 Dwarf King Theodore—A velvety crimson-maroon, almost black. The leaves are the darkest in Nasturtiums. Pkt., 5c.; oz., 15c.

2133 Dwarf Chameleon—Of brilliant shades and diversified markings; some self-colored, others splashed and mottled. Pkt., 5c.; oz., 15c.

2134 Empress of India—A very compact-growing sort, having purplish-green leaves; the flowers are fiery crimson. Pkt., 5c.; oz., 15c.

Dwarf Liliput Nasturtiums

This charming and distinct new class has very small flowers and leaves. In growth it is very compact, bushy and dwarf, being more so in both respects than the Dwarf Nasturtiums. In colors they are most varied and rich.

2152 Mixed—Pkt., 5c.; oz., 15c.

Queen of Holland (New Liliput Hybrids)—A dainty type of very dwarf growth, making fine compact little bushes only about 6 inches high. The flowers, although smaller than the regular Nasturtiums, are very brilliant in color and are produced in a wonderful variety of shades and combinations, including cream, rose, scarlet, orange, crimson—all beautifully blotched.

2131 Mixed Colors—Pkt., 10c.

Livingston's Glory of the Garden Mixture

This is our best mixture of the dwarf varieties. It is composed exclusively of the most elegant, large-flowered sorts, and the brilliantly colored flowers range through every shade and tint known in this favorite annual. This seed will produce a bed or border gorgeous beyond description.

2130 Glory of the Garden Finest Mixed—Large pkt., 10c.; oz., 15c.; ¼ lb., 50c.

Mixed Dwarf Nasturtiums—We handle such large quantities of Dwarf Nasturtiums that we are able to offer this especially choice mixture at a very low price. You should plant this mixture very liberally.

2150 Choice Mixed—Pkt., 5c.; oz., 10c.; ¼ lb., 25c.

Madame
Gunther
Hybrid
Nasturtium

Glory of
the Garden
Nasturtium

Nicotiana

(Sweet-Scented Tobacco Plant)—Handsome and well-known hardy annuals that grow easily from seed, forming compact bushes about 3 feet high, which are in continuous bloom throughout the season. The blooms are tube-shaped, very sweet-scented, and desirable as cut flowers; also fine for pots.

2158 Affinis—A very popular sort; its flowers are pure white and deliciously fragrant. Always in bloom. Pkt., 5c.

2160 Sanderæ—This beautiful hybrid *Nicotiana* form bushy, much-branched plants 2 feet high, the whole plant laden with flowers from base to summit—literally ablaze with handsome carmine-red fragrant blossoms, hundreds of which are produced on as single plant. Pkt., 10c.

Nigella (Love-in-a-Mist)

A very popular, old-fashioned flower; free-flowering, with finely cut foliage surrounding the curious looking flowers and seed pods. Easily grown from seed.

2163 Mixed—Pkt., 5c.

Ornamental Grasses

Effective and attractive for garden borders and ornamental groups. Also extensively used when dried for Winter bouquets.

1660 Coix Lachrymae (Job's Tears)—Beautiful variety. Has corn-like leaves, and hard, glossy gray colored seeds, which naturally have a hole in them like beads. 2 feet. Pkt., 5c.; oz., 10c.; 2 oz., (enough for a chain), 15c.; ¼ lb., 25c.; lb., 75c.

2170 Eulalia Zebrina (Zebra Grass)—The long dark green leaves are beautifully striped with yellowish white. Perennial. 5 feet high. Pkt., 10c.

2171 Purple Fountain Grass (Pennisetum)—Beautiful and graceful; is unequalled as an edging to tall-growing plants. Annual. 3 feet. Pkt., 5c.

Livingston's Mammoth Pansies

Our Pansy Seeds are grown exclusively for us by the best American and European Specialists. All our strains are from the most noted seed stocks in the world, and we know they cannot fail to give the most unbounded satisfaction to amateur and professional grower alike. Sow in the house, hot-bed, or green house; or as soon as the weather permits, the seed may be sown directly in the garden beds. Pansies thrive best in a rich soil, and cool, moist situation; they do splendidly in partially shaded places. They do not do well under trees, but in some locations where the sun strikes only part of each day the most satisfactory result can be obtained. Seed sown from July to September and the young plants transplanted into cold-frames for the Winter, will bloom grandly very early the following Spring. (Prices by ounce or larger quantities will be quoted upon application.) Free to our customers, leaflet on the culture of Pansies.

Nigella—Love-in-a-Mist

Giant Ruffled Masterpiece (Germania)

A remarkable type, the border of each petal being conspicuously curled and undulated, which gives the flower a double or globular appearance. The large blooms are beautifully blotched. **2181**—Pkt., 15c.; 2 pkts. for 25c.

Tufted Pansies

Especially adapted for shady places. While the flowers are not so large as in the other varieties of Pansies, their abundance is wonderful, and colors most varied. Hardy.

2231 White, 2233 Yellow, 2232 Blue, and 2230 Mixed, 10c. each per pkt.

Exquisite Orchid-Flowered Pansies

All the delicate shades and tints of the Orchids may be found in these charmingly pretty favorites. Rose, orange, pink, lilac, terra cotta, chamois and other exquisite shades are predominant and please all lovers of the delicate by their refined form and texture.

Orchid-flowered Pansies are not as large as some of our Giant strains; but they will appeal by their exquisite coloring and the elegant shape of their flowers. **2179 All Shades Mixed**—Pkt., 10c.

Mammoth Parisian Pansies

The French Pansies are large, and strongly marked and blotched; in a word they are very attractively "Frenchy." The strain we offer is one of great excellence, the individual flowers being superb, and include many fine shades. **2183**—Pkt., 10c.; 3 pkts. for 25c.

Giant German Pansies

The German Pansies are noted for their almost endless variations, which include striped, blotched bordered, veined, and marbled combination, in every possible color and shade. The plants are of compact growth, and flower most profusely and continuously all Summer. **2185**—Pkt., 10c.; 3 pkts. for 25c.

Livingston's Giant Pansy Mixture

This splendid mixture is a blended combination of giant-flowering pansies. It contains all colors and will prove a delightful surprise in regard to their great size. **2177 Giant Mixture**—Pkt., 10c.; 3 pkts. for 25c.; ¼ o.z., 75c.

English Pansies—The old-fashioned "English Face" Pansies. **2191**—Pkt., 10c.; 3 pkts. for 25c.

From Our Giant Pansy Mixture

Orchid-Flowered Pansy

Specimen Flowers
Livingston's Fancy
Pansy Mixture

Madame Perret

A splendid giant-flowering strain, which is of French origin. The flowers are produced most freely, and are of the greatest diversity of colors, comprising all shades of red, from lightest rose to darkest purple. Many are striped. 2189—Pkt., 15c.

Bugnot's Superb Blotched

The flowers of this splendid strain are of the largest size, and produce the handsomest and richest blotched varieties known in Pansies. We recommend this mixture. 2187—Pkt., 20c.; 3 pkts. for 50c.

Bedding Pansies in Separate Colors

For liberal plantings in the garden beds these fine sorts are the most desirable. The plants grow compactly, bushy, and bloom continuously. The bloom is of many beautiful shades but average smaller than the Giant sorts.

2210 Azure Blue; 2211 Black; 2212 Bright Brown; 2213 Brilliant Red; 2214 Dark Purple; 2215 Dark Red; 2216 Light Blue; 2218 Pure White; 2220 Pure Yellow; 2221 Violet, white margin; 2222 White, black center; 2224 Rosy Lilac—Price, each pkt., 5c.; 6 pkts., 25c.

Bedding Pansies Mixed

We have taken much pains in composing this mixture and it will make a rich display. Contains all the fine Bedding Pansies named above. 2225 Mixed—Pkt., 5c.; ¼ oz., 25c.; ¼ oz., 40c.; oz., \$1.25.

Our "Giant Six" Pansy Collection

This collection contains one packet (100 seeds) each of the following elegant varieties: Giant Red, Giant White, Giant Blue, Giant Purple, Giant Yellow and Giant Black. 6 packets in all for 25c.

Livingston's Fancy Pansy Mixture

In this magnificent mixture of mammoth flowering pansies the blossoms are borne on long stems well above the foliage and are distinguished for their gorgeous and varied colorings and beautiful markings; of fine substance, velvety texture, perfect form, and giant size, frequently measuring three inches in diameter. The colorings are wonderfully rich and varied; every shade and tint of rose, canary-yellow, black, white, cream, lavender, garnet, sky-blue and orange are produced in endless variation. An unequalled collection of all the finest types. The best, handsomest, and most perfect giant-flowering varieties. 2175 Fancy Mixture—Pkt., 25c.; 3 pkts., 60c.; ¼ oz., \$1.25.

Giant Trimardeau Separate Colors

2194 Gt. Atropurpurea (Rex)—Velvety, royal purple.....	10c.
2195 Gt. Emperor William—Indigo blue, blotched black	10c.
2196 Gt. Golden Queen—Pure golden-yellow; very fine..	10c.
2197 Gt. King of the Blacks—Lustrous, jet-black.....	10c.
2198 Gt. Lord Beaconsfield—Lavender, heliotrope, purple	10c.
2199 Gt. Peacock (Gloriosa)—Garnet, cream and blue....	10c.
2200 Gt. President Carnot—White, large violet blotches	10c.
2201 Gt. Snowflake—Spotless, snow white.....	10c.

Giant Trimardeau, Mixed—These are the largest flowered of all; a most showy class of robust and very compact growth. Flowers are carried well above the leaves. Mixture of finest colors. 2205—Pkt., 10c.; 3 pkts., 25c.; ¼ oz., 50c.

Platycodon Grandiflora

(Chinese Bell-Flower)

A splendid hardy perennial, producing large bell-shaped, white and blue flowers; very showy.

2297 Mixed—Pkt., 5c.; ¼ oz., 25c.

Pyrethrum (Feverfew)

Most attractive hardy perennials, which have become very popular. Valuable border plants with many stems about two feet high, each surmounted with handsome flowers, in the brightest shades of rose, flesh pink, crimson, etc.; in bloom a long time, and are splendid as cut flowers. (See Feverfew.)

2302 Single Hybrids—This mixture contains the very largest flowering and choicest varieties. Pkt., 15c.

2364 Golden Feather (Aureum)—Dwarf growing variety, with bright yellow foliage; largely used for edgings and ribbon work. Usually treated as an annual. ¾ ft. Pkt., 5c.; ¼ oz., 20c.

Giant Trimardeau Pansy

Fine Mixed Petunia

Primulas (Primroses)

The ease with which Primroses can be grown from seed makes them very popular window plants. For a succession of blooming plants sow the seed from March to May, and again in July or August; in planting, cover the seed lightly, and keep moist. Transplant when the second leaf appears, and keep re-potting the plants as they grow and increase in size. Height $\frac{1}{2}$ to 1 foot.

2346 Chinese Primrose—Superb Single Mixed—An elegant mixture, embracing all the best large-flowering varieties, and including the finest fringed sorts. Pkt., 25c.

2348 Chinese Primrose—Superb Double Mixed—Splendid strain of the finest large flowering, fringed varieties. Our mixture includes all the most brilliant colors. Pkt., 25c.

2350 Primrose—Choice Mixed—This is a very choice mixture, and for general purposes will be found most satisfactory. Pkt., 15c.

2352 Obconica Grandiflora—Large Flowering Hybrids—Lovely and profuse blooming Primrose, bearing on long stems large heads of beautiful flowers; white, tinged lilac and rose shades; ever-blooming variety with true Primrose fragrance. Pkt., 10c.

2354 Japonica (Japanese Primrose)—Very bright and showy flowers, borne in whorls on stems 6 to 9 inches long. Choicest colors. Pkt., 10c.

Phaseolus Multiflorus Papilio

2262 Butterfly Bean—A splendid climbing plant for arbor and trellises. The flowers are of large size with prettily waved snowy-white wings and salmon-rose standard, these two colors making a most agreeable and striking contrast. Pkt., 10c.; 3 pkts. for 25c.

Annual Phlox

For a splendid mass of color and a constant display, the Phlox Drummondii is not excelled by any other annual. It has every desirable quality for this purpose and for beds, edgings and massings nothing can surpass it. Seed may be sown in the open ground any time after danger from frost is past.

2269 Bright Rose—Most pleasing color; a profuse bloomer. Pkt., 5c.; $\frac{1}{4}$ oz., 40c.

2270 Brilliant Scarlet—Is especially showy in large beds or borders. Pkt., 5c.; $\frac{1}{4}$ oz., 40c.

2271 Crimson—Popular sort; very brilliant and effective. Pkt., 5c.; $\frac{1}{4}$ oz., 40c.

2273 Pure White—Pkt., 5c.; $\frac{1}{4}$ oz., 40c.

2274 Yellow—Distinct. Pkt., 5c.; $\frac{1}{4}$ oz., 40c.

2267 Prize Mixture of Large Flowering Phlox—Large pkt., 10c.; $\frac{1}{4}$ oz., 35c.; $\frac{1}{2}$ oz., 50c.

Phlox Drummondii—The old-fashioned favorite variety.

2265 Mixed—Pkt., 5c.; $\frac{1}{4}$ oz., 20c.; $\frac{1}{2}$ oz., 35c.

Star-Shaped Phlox—Long, pointed petals, which give the flowers a star-like appearance; plants grow compact and dwarf. **2278 Mixed**—Pkt., 5c.; $\frac{1}{4}$ oz., 30c.

Petunias

Petunias are one of the most popular annuals on account of their ease of cultivation and freedom of blooming, succeeding everywhere and giving a constant supply of flowers from June to October. They are also good house plants, flowering freely in a sunny window. Seed can be sown in the open ground early in the Spring or in a hot bed or cold frame, to be transplanted later to beds or borders. Height 1 to $1\frac{1}{2}$ feet.

Large-Flowering Petunias

The blooms are enormous in size and of the richest colors and markings. Varieties listed below are unsurpassed.

2240 Livingston's Superb Single Mixed—A strain of incomparable beauty and luxuriance. Flowers most varied in colors and markings; beautifully ruffled, fringed and of enormous size. Pkt., 15c.; 2 pkts. for 25c.

2244 Ruffled Giants—The flowers of this strain are of extraordinary size and great substance; the edges of the blooms ruffled. Contains the greatest variety of rare colors and combinations. Pkt., 25c.

2242 Giants of California—These Petunias are of great beauty and luxuriance, including fringed and deep-throated sorts in endless variety of colors, veinings and markings. Flowers of enormous size. Pkt., 15c.; 2 pkts. for 25c.

2246 Livingston's Superb Double Mixed—Our best mixture of all the large flowering double varieties, including striped, blotched and fringed sorts. Pkt., 25c.

Bedding Petunias

2250 Howard's Star-Shaped—Entirely distinct. The five-petaled blooms have star-shaped markings of blush-pink or write over maroon ground; very fine. Pkt., 5c.

2254 Snowball—A charming, compact-growing variety; grows about 8 inches high and yields in greatest profusion all season its pure satiny-white flowers. Pkt., 10c.

2256 Striped and Blotched—A most beautiful strain of Petunias for bedding and massing. Our mixture contains an endless variety of colors. Pkt., 5c.; $\frac{1}{8}$ oz., 40c.

2258 Finest Mixed—A choice mixture of colors and shades; will make a fine display in your garden. Pkt., 5c.; $\frac{1}{8}$ oz., 30c.

Annual Phlox

Oriental Poppy. Pkt., 10c.

Perennial Poppies

There are no flowers more ornamental and useful in our gardens than the various varieties of hardy Poppies. Once started they increase in size and beauty each succeeding season.

2334 New White Oriental—It is the most distinct "Break" that has yet been made in Oriental Poppies, it being a pure satiny white with a bold crimson blotch at the base of each petal, unquestionably the most important addition to the list of hardy perennial seeds. Like most hybrids the seedlings are liable to vary somewhat in color, but a good percentage can confidently be expected to come true. Pkt., 20c.

Large Oriental—Perhaps the most popular variety in cultivation, the sturdy plants growing about 3 feet high. Its color, a dazzling scarlet with coal-black blotches, is grand. For gorgeous effect, nothing can equal them in perfectly hardy plants. 2333—Pkt., 10c.; ½ oz., 35c.; ¼ oz., 50c.

2335 Oriental Hybrids—Splendid hybrids of Oriental Poppy. Enormous flowers, sometimes more than six inches in diameter. Colors include shades of cherry, salmon, darkest red, vivid crimson and innumerable others equally fine. Our mixture contains them all. Pkt., 10c.; ½ oz., 45c.; ¼ oz., 60c.

2330 Iceland (Papaver Nudicaule)—These Poppies are perfectly hardy and in bloom from June until frost; beautiful satin-like flowers, of every shade of yellow, white and orange-scarlet. Plants grow about 12 inches high, forming tufts, from which the flower stems issue most profusely. Very useful for cut flowers. Easy to grow. Pkt., 10c.; ½ oz., 20c.

2332 Double Mixed Iceland—This splendid mixture of double-flowering varieties you will find very superior. Pkt., 10c.; 3 pkts., 25c.

Portulaca (Sun Plant)

Should be sown in every garden. Scarcely any annual in cultivation makes such dazzling display of beauty as a bed of highly colored, many-hued Portulacas. Plant in dry sandy soil, soon as it becomes warm, with full exposure to the sun.

Large-Flowered Single Mixed—A most elegant mixture; flowers large and of every shade of color. 2340—Pkt., 5c.; oz., 40c.

Rose-Flowered—From this assortment more than one-half of the plants will produce double flowers; these plants can be transplanted 8 inches apart as soon as they bloom, thus making an entire bed of double bloom. Our mixture contains all best double varieties. 2342—Pkt., 10c.; ¼ oz., 60c.

Poppies

The recent development of these old-fashioned flowers has brought them into great and deserved popularity. No flower in our garden affords a more pleasing display of gorgeously brilliant coloring during the blooming season. Poppies of the various varieties grow about 2 feet in height, except as noted.

Double Annual Poppies

2300 Paony Flowered—Large, showy double globular flowers; almost equal to Paenies. Our mixture contains the finest colors. Pkt., 5c.; ½ oz., 15c.; oz., 25c.

2302 White Swan—Pure snow white, double and large size. Beautifully fringed. Pkt., 5c.

2304 American Flag—Very beautiful variety. Flowers extra large and double. Snow-white, bordered with scarlet. Pkt., 5c.

2306 Fairy Blush—Immense flowers, perfectly double, 5 inches across; elegantly fringed; pure white, rose-tipped petals. Pkt., 5c.

2308 Carnation Flowered—Splendid large double flowers; showy and beautifully fringed. Mixture is unequaled for dazzling richness and great variety of colors. Pkt., 5c.; ½ oz., 15c.; oz., 25c.

2310 "Mikado" (The Striped Japanese Poppy)—Very distinct and beautiful; the large blooms are brilliant scarlet and white, with elegantly curved and fringed petals. Pkt., 5c.; ¼ oz., 10c.

Livingston's Giant Double Mixed—A mixture of beautiful double Poppies, including only the improved double, giant-flowering kinds of the richest and brightest colors, as well as the daintiest and softest tints. When grown in masses it is brilliant beyond description. The plants are sturdy, thrifty growers, from 2 to 3 feet high, producing immense flowers, sometimes 4 inches in diameter. Sow the seeds in the early Spring in sandy soil where they are to remain.

2311 Mixed—Pkt., 5c.; oz., 35c.

Single Annual Poppies

2316 Livingston's Giant Shirley—These are considered by many the most charming Poppies in cultivation. The individual flowers are large and elegant, mostly single blooms, some semi-double and double ones, often measuring from 3 to 4 inches across. The petals are fluted and crinkled and in the sun appear like crumpled satin. The exquisite colors range from purest white to the deepest of blood-red, through all the shades and combinations of pink, rose, crimson and carmine. Pkt., 5c.; ¼ oz., 20c.; oz., 60c.

2321 Danebrog (Danish Cross)—A very showy single variety; brilliant scarlet, blotched with silvery gray. Pkt., 5c.

2323 Tulip Poppies—Large and splendid single flowers of the most dazzling scarlet. The two outer petals resemble a saucer, in which are set two erect petals of the same color. Pkt., 5c.; ¼ oz., 20c.

2325 New Admiral—Of surprising beauty. Large, round, smooth edged flowers of glistening pure white, with a broad band of brilliant scarlet around the top. Pkt., 10c.

2327 Livingston's Single Mixture—Every color ever seen in Poppies, and every conceivable combination of colors is found in this elegant mixture. Pkt., 5c.; ½ oz., 20c.; oz., 35c.

Rose-Flowered Portulaca. Pkt., 10c.

Ricinus

(Castor Oil Bean)

2370 Zanzibariensis—A new and distinct class, surpassing in size and beauty all varieties hitherto known. Plants attain great dimensions—12 to 14 ft. **Pkt., 5c.; oz., 20c.; ¼ lb., 60c.**

2371 Borboniensis—Very large and most showy green foliage; a standard variety. 10 to 15 ft. **Pkt., 5c.; oz., 20c.**

2372 Cambodgensis—Main stem and leaf stalks shining ebony black; leaves large and brilliantly colored. Foliage assumes various shades. 5 feet. **Pkt., 5c.; oz., 20c.**

2373 Gibsoni—Compact growing variety of branching habit. The large leaves are a deep red. 5 ft. **Pkt., 5c.; oz., 20c.**

2377 Livingston's Ricinus Mixture—Appreciating fully the splendid effects that a fine array of these desirable foliage plants will make in your garden, we have composed a mixture that for elegant blending is unsurpassed. **Pkt., 5c.; oz., 15c.; ¼ lb., 50c.**

Ricinus. Pkt., 5c.

Salvia (Flowering Sage)

Very ornamental plants, for Summer and Autumn flowering bloom in spikes, and continuing to bloom in the open ground until hard frosts, forming compact bushes, which are literally ablaze with brilliant flowers. While tender perennials, they bloom like annuals the first season from seed. The plants may be started in a box in the house or in the hotbed, and when the weather becomes warm transplant in the garden. Height 2 to 3 feet. (See illustration.) May be used as a hedge with striking effect.

2384 Splendens Grandiflora (Scarlet Sage)—Gorgeous plants, numerous spikes of intensely vivid scarlet flowers 10 to 12 inches in length. Continues to flower profusely all Summer and Fall. Of easy growth. The most popular Salvia in cultivation. **Pkt., 10c.; ½ oz., 25c.**

Salvia
Splendens

2386 Bonfire—Plants form healthy bushes about 2 feet high by 2 feet across. Spikes grow erect and stand clear above the foliage, completely covering the plant, and are of a most brilliant, dazzling scarlet. One of the finest sorts. **Pkt., 10c.; ½ oz., 50c.**

2398 Zurich—Compact growing sort, forming handsome, symmetrical bushes, 15 to 18 inches tall, which are completely covered with scarlet flower spikes. A little beauty. **Pkt., 10c.**

New Ostrich Plume
—See Novelty Pages.

Mrs. M. G. Kethley, Hinds Co., Miss., writes: "I have used your flower seeds for several years on Mississippi College Campus and found them par excellent. They cannot be surpassed."

Mrs. Chas. H. Parsons, Charleston Co., S. C., writes: "I am sending you my order again for flower seeds. I am more than pleased with them. I was so proud of my lovely Nasturtiums last spring. Please rush this order as I want to get the seeds in right away."

Roses

(Bloom the First Year from Seed)

2380 Baby Roses, also called **Dwarf Midget, or Fairy Roses**—These beautiful little roses are borne in many flower clusters of double, semi-double and single flowers and are of all the tints of other roses. Seed should be soaked in warm water a day or two before planting; perfectly hardy, blooming year after year. **Pkt. (50 seeds), 10c.; 3 pkts., 25c.**

Salpiglossis

(Painted Tongue)

The Salpiglossis is one of the most popular and favorite annuals. It is of the easiest culture. Especially is it noted for its beautiful, almost orchid-like blooms. (See illustration below.) Our mixture is unsurpassed, containing every desirable color and shade of the large-flowering varieties. 1½ feet. **2400 Mixed—Pkt., 5c.**

2388 Silverspot—Strikingly handsome spotted foliage. Leaves rich, soft, dark green, with light yellowish spots of various size sprinkled over them, and have a fresh, healthy appearance. Flowers are large, bright red; plants of neat, compact habit. Comes quite true from seed. **Pkt., 10c.**

2390 Scarlet Dragon—A magnificent free-growing new variety, forming dense, bushy plants, 3 feet high; with clean, light green foliage, and bearing innumerable mammoth spikes of vivid carmine scarlet flowers of extra large size. Splendid for borders, beds and masses, as it is always in bloom and vividly gay. **Pkt., 10c.**

Salpiglossis, or Painted Tongue.

Scabiosa

(Sweet Scabiosa, Mourning Bride, Pin-Cushion Flower, Egyptian Rose, etc.)—The seed can be sown any time in the Spring after danger from frost is past. The plants grow about 2½ feet high, and come into bloom early in July, continuing without interruption until the hard frosts of Autumn. The exquisite double flowers (see illustration) are borne on very long stems, and when cut keep in perfect condition for the best part of a week.

2404 Livingston's Improved Large-Flowering Scabiosas, Finest Mixed Colors—A very fine mixture, containing all the finest large-flowering double sorts. All colors. Pkt., 5c.; oz., 30c.

2406 Azure Fairy—Exquisite sky-blue. Pkt., 10c.

2408 Fiery Red—Very striking; double; fiery scarlet. Pkt., 5c.

2410 Black Prince—Very large; double; almost black. Pkt., 5c.

2412 Snowball—Double white flowers; fine for bouquets. Pkt., 5c.

2414 Golden Yellow—Very fine color. Pkt., 5c.

2416 Pompadour—Claret-purple, edged white. Pkt., 5c.

2418 Flesh—Pkt., 5c.

2419 Rose—Pkt., 5c.

2420 Lilac—Pkt., 5c.

2421 Cherry Red and White—Pkt., 5c.

2422 White and Lilac—Pkt., 5c.

Collection Scabiosa, above 11 separate colors 50c.

2426 Hardy Scabiosa Caucasica—Grand hardy perennial, 3 feet high; large lilac-blue flowers; splendid for cut flowers. Pkt., 10c.

Shasta Daisy. Pkt., 10c

Shasta Daisies

A hardy perennial plant; blooms more abundantly each season; multiplied by division of roots or sowing seed. They bloom for several months in great abundance. The flowers are large

and graceful, with three or more rows of pure white petals.

2433 Selected Seed—Much superior to original strain. Pkt., 10c.

Schizanthus or Butterfly Flower

Popularly called the "Poor Man's Orchid." It grows from a foot to eighteen inches tall, with fine fern-like foliage, begins to flower early and produces masses of oddly marked and queerly shaped blooms in various shades of blue, purple and pink and some pure white.

2427 Schizanthus Mixed—5c. per packet.

2428 Schizanthus Wisetonensis—A new large-flowering type—20c. per packet.

Scarlet Runner-Bean

Ornamental climber. Bright scarlet sprays of bloom, followed by edible beans. **2429**—Pkt., 5c.; ¼ lb., 25c.

Sensitive Plant

A pretty and curious annual plant; the leaves and foot-stalks close and droop at the slightest touch or in cloudy damp weather. 1½ feet. **2430**—Pkt., 5c.

Smilax

Charming and tender perennial climber for house or greenhouse. **2435**—Pkt., 5c.

Stokesia Cyanea

(Cornflower Aster)—A valuable hardy perennial, bedding plant. Plants large, 18 to 20 inches high, with Bachelor Button-like, light lavender-blue flowers, which are several inches in diameter. Are produced from July until late in October. Very easily grown in almost any situation. **2436**—Pkt., 10c.

Ida Ferguson, Edgar Co., Ill., writes: "I have used your seeds for 15 years, without missing a single year and have always found them good. Who can show a better record?"

Ten-Week-Stock Snow White. Pkt., 10c.

Stocks (Gilliflower)

Indispensable for bedding, borders, massing or pot culture.

Large-Flowering Double "Cut and Come Again" Varieties.

2446 Snow White—(See illustration.) Pkt., 10c.

2440 Finest Mixed—This is our very best mixture of large-flowering Stocks. The perfectly double flowers embrace every color and shade. Pkt., 10c.

2448 Giant Perfection Stocks—Long spikes of double flowers. Pkt., 10c.

2450 Fine Mixed Stocks—A choice mixture of various colors and shades. Pkt., 5c.

Sunflower

(Helianthus)

A well known family of hardy annual, very showy plants, large flowers.

2454 New Miniature—Beautiful new hybrids; small single flowers in great abundance; colors, creamy white, lemon and orange; indispensable for cutting. Pkt., 5c.; ¼ oz., 20c.

2456 Globe of Gold—Globe-shaped, double yellow flowers. Pkt., 5c.

2458 Mammoth Russian—Very large single flowers. The seed is also grown largely for feeding to birds, fowls and poultry. Oz., 5c.

2460 Livingston's Mixed Sunflowers—A great variety of single and double varieties. Every shade of yellow is included. Pkt., 5c.; ½ oz., 15c.; oz., 25c.

White Spencer

Spencer Sweet Peas

How to Grow Fine Sweet Peas.—The general opinion is that Sweet Peas being common and hardy can be planted anywhere, which accounts for a lot of failures. There is no reason why everyone should not have fine flowers if they will observe a few simple rules. First of all, **plant early**, just as soon as the ground can be dug and is not sticky. **Dig deeply.** If you are growing sweet peas every year, try and prepare your ground in the Fall, and dig 18 inches deep, mixing manure thoroughly in the subsoil. The surface soil in which the seed is sown should not contain manure. If you start in the Fall you will find you can sow earlier in the Spring. If you can't secure manure, use bone meal or commercial fertilizers containing phosphate and potash. Cover the ground an eighth of an inch with these and then dig in and mix thoroughly with the soil. Sow the seed three inches deep if on sandy soil, or two if in clay. Sow thinly unless you have the courage to pull them out after they come up. You can't have fine flowers through the season when plants are very thick. Two or three inches apart, or better, four inches if you want big flowers. Cultivate as soon as they are up and keep cultivating. Stake them as soon as the rows show plainly. For the first month they scarcely make any growth above ground, but don't need water unless the season is very dry. Later on, when they are showing vigorous growth, a thorough watering twice a week will help wonderfully, if there is not sufficient rain. Don't plant them alongside a house, under trees or close to a board fence and expect much from them. They need an open space.

King White

2626—Undoubtedly the best white now in cultivation. It is remarkable for the "**glistening immaculate purity of the whiteness**" and the perfect finish of the flower. While of truly gigantic proportions, the flowers are most exquisitely finished in every detail. The grand flowers are born almost invariable in "fours" upon stout stems of great length. Pkt., 15c.; oz., 40c.

Illuminator

2627—It might be described as a rich glowing cerise-salmon, with an indication of bright orange suffusion. The flowers are most perfectly formed, and well placed on long stout stems, frequently in "fours." Pkt., 15c.

Margaret Atlee

2625—Margaret Atlee is a rosy salmon-pink on a creamy buff ground; a rich, soft color, and extremely attractive, both as individual flowers and in the bunch. The standard is large and wavy and inclined to double. It runs almost uniformly four blossoms to the stem; well poised and graceful. Many double blooms are seen in this sort, due to its very robust growth. Pkt., 15c.; oz., 40c.

Wedgewood

2628—Wedgewood is a unique shade of lovely light blue. The flowers, of good size and substance, are well waved in both standard and wings; they are borne almost uniformly in four-flowered sprays upon long stout stems. Pkt., 15c.; oz., 50c.

This Great Collection of Superb Spencer Sweet Peas—Seven Liberal Packets for 25 Cents, Postpaid

Astha Ohn Spencer—Finest lavender Spencer Sweet Pea grown. Comes remarkably true to type, producing the elegant, hold, wavy flowers in greatest profusion. **2584**—Pkt., 10c.

Captain of the Blues Spencer—Purplish maroon standard and bluish purple wings with veins of rosy purple make this exquisite sort one of the finest in our collection. The immense flowers are of true Spencer type, well waved and crinkled. **2620**—Pkt., 10c.

Othello Spencer—Deep velvety maroon. By far the finest of the dark-colored Spencers. Of very large size and beautiful form. **2623**—Pkt., 10c.

White Spencer—Without doubt the largest and most magnificent White Sweet Pea ever introduced. The vines are almost completely covered with mammoth flowers. The flowers are borne 3 to 4 on a stem and are of splendid substance. It is without a rival among White Sweet Peas. **2590**—Pkt., 10c.

King Edward Spencer—Undoubtedly the largest and best scarlet Sweet Pea to date. Each stem carries from 3 to 4 enormous flowers. Wings carmine-scarlet, reverse side rosy carmine. The beautiful blossoms are carried on long, stiff stems. **2583**—Pkt., 10c.

Countess Spencer—Of perfect form, remarkable size and exquisite color. The flowers are often 1½ to 2 inches in diameter, with both standard and wings charmingly waved and fluted. The coloring is an exquisite **soft rose-pink**, daintily tinted with silvery white. **2570**—Pkt., 10c.; oz., 25c.

Helen Lewis Spencer—This superb variety is a grand gigantic orchid-flowering seedling of Countess Spencer. The orange-rose wings roll and fold; the standard is reflexed and is of an intense **rich crimson-orange**. **2580**—Pkt., 10c.; oz., 25c.

From Mrs. Chas. F. Patten, Ford Co., Ill., Feb. 15, 1917—
"Please send me one of your 1917 catalogs for flower and garden seeds, for there are none better than you True Blue."

Spencer Seedlings Mixed

Spencer Sweet Peas (Continued)

Blanche Ferry Spencer

The popular old "painted lady" pink and white Sweet Pea in magnificent new form. 2591—Pkt., 10c.; oz., 25c.

Mrs. Routzahn Spencer

May be described as buff or apricot, suffused with delicate pink which deepens to a rose near edges of wings and standard. Usually four to a stem. 2613—Pkt., 10c.; oz., 25c.

Senator Spencer

The combination of color in the flowers is charming—a deep claret or chocolate, striped and flaked on a ground of light heliotrope. Both standard and wings are extra large, wavy and drooping. Flowers are usually borne four to the stems. 2621—Pkt., 10c.; oz., 25c.

Dainty Spencer

White, with exquisite rose-pink edges. Of uniformly large size and elegant shape. 2615—Pkt., 10c.; oz., 25c.

Aurora Spencer

Very large and of true "Spencer" type. The ground color is creamy white, which is finely flaked and mottled with orange-salmon. 2622—Pkt., 10c.; oz., 25c.

Beatrice Spencer

White, tinted with soft pink and buff on standard, while the wings have prominent blotches, of a brighter pink near base. 2614—Pkt., 10c.; oz., 25c.

Primrose Spencer

Both standard and wings are of beautiful, soft Primrose or creamy yellow color. Flowers are very substantial and in a class of their own in both color and size. 2610—Pkt., 10c.; oz., 25c.

Spencer Seedlings Mixed

All of the best-named sorts, also many rare new hybrids in lavender, blue, striped, mottled, purple, maroon and many other shades are included in this superb mixture. All flowers are of extremely large size, typically frilled and waved, and very lovely. 2630—Pkt., 10c.; oz., 25c.

Eight Best Grandiflora or Large Flowering Varieties for Only 25 Cents, Postpaid

The greatest bargain in 'grandiflora' Sweet Peas on record. Full-sized packets, finest sorts, lowest price consistent with top-notch quality. Order to-day—before you forget where you saw this offer.

2467 Dorothy Eckford—An exceptionally fine white variety as popular as the new "Spencer type on account of its beautiful hooded flowers, borne three and even four on very long stems, making it of exceptional value to the florist.

2530 Romolo Piazzani—A grand blue Sweet Pea. The color is almost a true violet-blue self; the standard is only slightly hooded; grand flowers.

2484 Blanche Ferry—The popular pink and white; always reliable.

2499 King Edward VII.—The largest and best bright crimson scarlet.

2474 Mrs. Collier—Flowers are extra large, coming in threes and fours on a long stiff stem and of a rich primrose tint, entirely free from any trace of pink. **Richer in coloring than any other primrose variety.** Can be described as a primrose Dorothy Eckford.

2488 Prima Donna—Lovely soft pink, hooded form, vigorous grower.

2505 America—Brightest blood-red striped, on white ground, superb.

2515 Lady Grisel Hamilton—Beautiful silvery lavender.

One packet each of the above Grand Sweet Peas, 25c.

All the Best Named Grandiflora Sweet Peas

The varieties listed below are the cream of all known sorts. Only those are included in our collection which produce flowers of the finest form and largest size. Every shade and color amongst Sweet Peas will be found. All inferior varieties have been discarded.

For the convenience of our customers we have arranged the varieties in tables according to color.

Prices for Any Sweet Peas Named Below

FREE—If requested with order, our pamphlet of cultural directions telling **How to Grow Perfect Sweet Peas**.

5c. per packet—enough for a single row 5 feet long.

Any six packets for 25c.

15c. per oz.—enough for a single row 15 feet long.

40c. per ¼ lb.—enough for a 60-foot row.

White

2466 **Blanche Burpee**—Large; pure white; fine form; grand flower.

2467 **Dorothy Eckford**—A grand white. The stems are extra long and stiff and usually carry three flowers of grand size, substance and form. (See illustration.)

2468 **Emily Henderson**—Large, pure white, profuse, early and continuous flowering.

Creamy and Yellow Primrose

2473 **Hon. Mrs. E. Kenyon**—The most desirable of all Primrose Sweet Peas. Grand, large flowers, splendid form.

2474 **Mrs. Collier**—Flowers are extra large, coming in threes and fours on a long, stiff stem and of a rich primrose tint, entirely free from any trace of pink. Richer in coloring than any other primrose variety. Can be described as a primrose Dorothy Eckford.

2475 **Stella Morse**—Has a faint tinge of pink underlying the cream, producing a true apricot shade; beautiful for bunching.

Miss F. Holzhauer, Wood Co., Ohio, writes: "I had a most beautiful flower bed last year the seeds coming from Livingston's. I was very much pleased."

Blush and Light Pink

2478 **Dainty**—Crystal-white, with pink flush, deepening to a pink edge.

2479 **Jennie Gordon**—Standard bright rose, shaded cream; wings creamy, suffused rose.

2480 **Lovely**—Soft shell pink; exquisite shade; large size.

Pink and White

2484 **Blanche Ferry**—The popular pink and white; always reliable.

Rose and Pink

2488 **Prima Donna**—Lovely soft pink; hooded form; vigorous grower.

2489 **Prince of Wales**—Very elegant rich carmine rose; a grand flower.

Maroon

2495 **Black Knight**—A very rich, dark maroon, veined black; the darkest of all.

Red and Scarlet

2499 **King Edward VII.**—The largest and best bright crimson-scarlet.

2501 **Salopian**—Rich, deep crimson-red enormous flower; elegant sort.

2500 **Queen Alexandra**—An intense scarlet sort, with bold expanded flowers of finest form. It is very free flowering, with long, strong stems. The flowers do not burn in the sun.

Blue

2530 **Bomolo Piazzani**—A grand blue Sweet Pea. Color is almost a true violet-blue; standard slightly hooded; grand flowers.

From C. M. Taylor, Wicomico Co., Md., Jan. 16, 1917: "I am sending you the names of five persons. I think if they ever use any of your True Blue Seed they will not want any other."

Miss J. C. Burgen, Erie Co., N. Y. writes: "Regarding a small sample of Sweet Peas which you sent me this Spring, I want to say they are the handsomest Sweet Peas I ever saw. The red, white and pink ones blossomed nearly all double with three flowers on nearly every stem. No one has anything like them that I have ever seen."

Named Grandiflora Sweet Peas (Continued)

Lavender and Light Blue

2513 Admiration—A grand large flower of beautiful form, self-colored in a delicate shade of rosy lavender.

2514 Flora Norton—A very beautiful rich lavender, entirely free from any mauve or pinkish tinge. The flowers are large and of fine form; one of the most delicate and pleasing shades for florists' use as a cut flower.

2515 Lady Grisell Hamilton—Beautiful silvery lavender.

2516 Mrs. Walter Wright—This new giant-flowering variety is a beautiful shade of mauve, clear and bright, with wings of a bright coerulean blue, shaded slightly with mauve.

PRICE—Any of above-named Sweet Peas, Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 40c.

Orange and Salmon

2522 Henry Eckford—The nearest approach to an orange-yellow in Sweet Peas; a beautiful color. Medium large and open form.

2523 Miss Wilmott—Enormous bold, upright flowers on stout stems. Wings and standard are of richest orange-pink, delicately shaded rose.

Striped and Variegated

2505 America—Brightest blood-red striped white.

2506 Aurora—Orange-salmon, flaked and striped white.

Our Sweet Pea Mixtures for 1918

Most people like as big a variety of Sweet Peas as they can get. To buy a dozen separate packets and mix them would be far more expensive than to buy an ounce of our Special Mixture, and even then the packets would not contain nearly the assortment of colors found in this mixture. We make up these mixtures ourselves, using the best and most popular sorts in pleasing proportion as to colors and shades.

Livingston's Special Mixture

This superb mixture is our special pride. During the several years we have sold it, it has been our constant aim to improve and perfect it. The different kinds and sorts contained in this mixture are grown separately, so that we have an opportunity to choose only the largest and most beautiful varieties. These we mix ourselves in proper proportions for the most brilliant effect. It embraces the finest American and Eckford varieties, as well as the latest novelties, and will produce a great abundance of giant flowers of beautiful colors. Some are edged, mottled, blended, flaked and striped. Without exception, this is the very finest mixture it is possible to make. We recommend that our customers buy these seeds by weight and plant liberally.

2540 Special Mixture—Large pkt., 10c.; oz., 25c.; $\frac{1}{4}$ lb., 60c.

Livingston's Gilt Edge Mixture

This is a very superior mixture, made up of over 50 of the finest named varieties; all bright colors.

2542 Gilt Edge Mixture—Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 35c.

Fine Mixed

This mixture, for the price, will be found very satisfactory. It contains a great variety of choice colors and shades.

2543 Fine Mixed—Pkt., 5c.; oz., 15c.; $\frac{1}{4}$ lb., 25c.

Sweet Pea "Nitroculture" adds to the size of the bloom and to the length of stem. In ordering be sure to mention Sweet Pea Nitroculture as there are other kinds. For full particulars, see Page 59.

Sweet William

(*Dianthus Barbatus*)

A very beautiful class of easily grown and very beautiful plants of extreme richness and diversity of colors, deliciously sweet scented. For cut flowers they are not surpassed. Hardy biennial. Height 1 to 1½ feet.

Holborn Glory

This strain is a large-flowered selection of the Auricula-Eyed section, but most beautiful and admired of all Sweet Williams. The individual flowers and trusses are of extraordinary size, and the range of color, all showing a clear, white eye, is superb. **2640**—Pkt., 10c.

Sutton's Scarlet

The color of this variety is an intense scarlet similar to a Grenadin Carnation. **2649**—Pkt., 15c.

2643 Double Mixed—This mixture you will find of very superior quality; containing all colors and shades. Pkt., 5c.; $\frac{1}{4}$ oz., 20c.

2646 Single Mixed—A very choice assortment of all the best single-flowering varieties. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.

2648 Double and Single Mixed—This mixture is made by blending the double and single-flowering varieties. Pkt., 5c.; $\frac{1}{4}$ oz., 15c.; oz., 50c.

Mrs. H. N. Chapman, Shelby Co., Mo., writes: "I have used the Livingston seeds for four years and I would be afraid to use any other now. I used to have very poor gardens, but now I raise as fine stuff as any one for miles around, so I find it is in the seed, not in the person. I will try to get as many friends to send when I send as I can."

Livingston's Mammoth Verbena. Pkt., 10c.

Thunbergia

Rapid-growing Annual Climber, with pretty buff, white and orange flowers of various shades, with a dark center or eye. Adapted for vases, hanging baskets, trellises, etc. 2654 Mixed—Pkt., 5c.

Valeriana

(Hardy Garden Heliotrope)—Showy plants; grow in any garden soil; do well in the shade. Hardy perennial; grows 2 feet high and blooms the first season from seed. Fine for bouquets. Bright rose, red and white varieties. 2658 Mixed—Pkt., 5c.

Vinca

(Periwinkle)—Free-flowering, bushy plants, with glossy foliage and beautiful circular flowers. In sunny situations they bloom all Summer; if potted before frost, will bloom in Winter; very easily grown, blooming profusely the first season from seed. A very fine mixture of all colors. Half-hardy perennials. 1½ feet high. 2680 Mixed—Pkt., 5c.

Wild Cucumber

(Echinocystis) — Rapid-growing annual climber. Has beautiful leaf and pretty fragrant white flowers. 2695—Pkt., 5c; ½ oz., 10c; oz., 15c.

Xeranthemum

(Everlasting Flowers) — Very desirable. Easy to grow. Leaves covered with silvery down. Hardy annual. 2 feet. A very fine mixture of colors. 2697 Mixed—Pkt., 5c.

Mr. C. J. Riebe, Trumbull County, Ohio, writes, February 7th, 1916: "We have always had good success from your seeds. Could get cheaper seed nearer home, but found out last year that they are not as good. My Little Marvel Peas were several days earlier than any peas in the neighborhood. I bought one ounce of your Special Sweet Pea Mixture and they were grand. I supplied the neighborhood with bouquets. Some days we picked over 2,000 blossoms. Took first premium at the County Fair on Pom-pom Zinnias, and took first on several vegetables and Prize-taker Onions."

Livingston's Mammoth Verbenas

If it were possible, it would seem to us that Verbenas are becoming more popular every year. The plants thrive in any good garden soil, and if grown from seed are much more vigorous than if started from cuttings. Verbenas will flower perfectly from seeds. Height 1 to 1½ feet.

2675 Helen Willmott—This new variety is a distinct color in Verbenas, being a bright salmon rose with a white eye. Pkt., 15c.

2662 Mammoth Defiance—Bright, rich scarlet; small leaves. Pkt., 10c.

2663 Mammoth Blue Varieties—Showy, distinctive; fine for edgings. Pkt., 10c.

2665 Mammoth Pink Shades—Many very brilliant shades of pink. Pkt., 10c.

2664 Mammoth Striped Varieties—Beautiful; a rich collection. Pkt., 10c.

2666 Mammoth Pure White—Large trusses of purest white flowers. Pkt., 10c.

2668 Mammoth Purple—Deep royal purple. Pkt., 10c.

Collection, one each of above 7 Mammoth Verbenas, 50c.

2670 Livingston's Mammoth Mixed Verbenas—Our strain of these elegant mammoth-flowering Verbenas will make beds and borders in the garden of the greatest brilliancy. These are our best Verbenas, and for enormous flowers of rich and superb colors are unsurpassed. (See illustration.) They bloom most profusely. Our mixture contains every desirable color and shade. Pkt., 10c.; ¼ oz., 25c.; ¼ oz., 50c.; oz., \$1.50.

2672 Fine Mixed—A very satisfactory assortment containing many fine colors and shades. Pkt., 5c.; ¼ oz., 15c.; ¼ oz., 25c.; oz., 90c.

Violet

(Viola Odorata)—Sweet-scented Violets are easily grown from seeds; and if you can plant them in a cool and moist situation, so much the better. All varieties are of great beauty.

2682 Sweet-scented—Old-fashioned Blue Violet. Pkt., 10c.

2684 The Czar—Largest flowering deep blue. Pkt., 10c.

2686 Finest Mixed—Blue and white sorts. Pkt., 10c.

Wallflower

Well-known and deliciously fragrant half-hardy biennials; the large spikes of bloom are of most beautiful colors. Height 1½ feet.

2690 Large-Flowering Single Mixed—Pkt., 5c.

2692 Large-Flowering Double Mixed—Pkt., 10c.

See complete list of Zinnias, next page.

Mammoth Flowering Zinnias

Double Pompon Zinnias. Pkt., 5c.

Striped, or Zebra

A very pretty strain with striped flowers. Colors vary on each plant; presents a beautiful and curious appearance. 2721—Pkt., 5c.

Curled or Crested

A fine strain, with large double flowers of perfect form; petals twisted, curled and crested into fantastic and graceful forms. 2723—Pkt., 5c.; ¼ oz., 25c.

Tom Thumb, or Double Miniature

Charming, perfectly double, small-flowering class; 10 inches high; bloom profusely. Fine for borders. 2725 Mixed Colors—Pkt., 5c.

Have You a Hardy Garden?

So much interest is being displayed in the hardy perennial flowers at the present time that a few words here regarding them may not be amiss. You will find throughout our List Seeds of many of the most popular sorts. Perennials are not difficult to grow, but most of the varieties are slower in starting than the annuals, so that care should be taken that the ground does not dry out. The ideal place to start them is in a cold frame, where the soil can be kept constantly moist, and when the young plants appear they can be protected from heavy rains. Some varieties bloom the first year from seed if they are sown early, but it is not until the second year that you get the best results, and from that on for several years these beautiful plants increase in value, affording color in the garden at a season when few, if any, annuals are blooming, and at the same time furnishing fine material for house decoration, as most of these varieties are excellent as cut flowers. *Coreopsis lanceolata*, *Gaillardia grandiflora*, *Shasta Daisy*, and a few others are not reliable unless they are divided and reset in the early fall after flowering, but such varieties as *Delphinium* or *English Larkspur*, *Pyrethrum Hybridum*, *Oriental Poppy*, *Columbine* and *Sweet William* may be depended upon for years. It is so much cheaper to grow them than to buy the plants.

Livingston's Superior Zinnias

One of our most stately and showy border plants; a strong grower, and therefore succeeds well, even if the ground is not very rich. Excellent for cut flowers, and continuously in bloom. Height 1 to 3 feet.

Livingston's Mammoth Flowering Prize Zinnias

These splendid large-flowering Zinnias (see illustration on page 106) represents the very highest perfection in this flower, and of perfect doubleness, mammoth size, as well as the wonderful variety of colors and shades, are unsurpassed by any strain in cultivation. We offer the following splendid separate colors and our elegant mixture.

2700 Mammoth Crimson
2701 Mammoth Dark Purple
2702 Mammoth Flesh-Pink
2703 Mammoth Lilac

2704 Mammoth Pure White
2705 Mammoth Rose-Pink
2706 Mammoth Golden Yellow
2707 Mammoth Scarlet

Above 8 sorts, each 5c. per packet; ¼ oz., 20c.; oz., 60c.
2710 Livingston's Mammoth Flowering Prize Mixture—A gorgeous mixture containing many new and rich hues. Pkt., 5c.; ¼ oz., 15c.; oz., 50c.

Double Pompon

(See illustration.)—These Zinnias grow 2 feet high and are sturdy and bushy. They are also sometimes called "Lilliput," on account of their beautiful little flowers, which are very double and cone-shaped. 2727 All Colors Mixed—Pkt., 5c.

Improved Dwarf Zinnias

This strain, not growing so high as Livingston's Prize Zinnias, is especially desirable for borders, edgings and small beds. The individual flowers are equally large. 2714 Improved Dwarf Mixture—Pkt., 5c.; ¼ oz., 20c.; oz., 60c.

New Double Fringed

A very fine new type. The petals of the perfectly formed double flowers are more or less deeply cut or fringed, giving them a more graceful appearance than the usual form. The plants are of compact habit, about 30 inches high, and have all the free-flowering merits of the family. We offer three separate colors:

2717 White.

2718 Deep Carmine.

2719 Bright Rose.

Each, packet, 10c.

Collection—A packet of each of the 3 Double Fringer Zinnias, 25c.

Wild Flower Garden, or Children's Garden

Especially adapted for producing a display in large borders, or sowing along woodland walks, railroad embankments, for hiding an unsightly fence, stump, etc. Nothing in the way of flowers delights children more than this **WILD GARDEN**, chiefly because they can be allowed to pick their own bouquets without stint. Sow in drills 2 feet apart, or even broadcast. Cover lightly and keep the soil from drying out until started. 2740 Our Extra Choice Mixture—Large pkt., 10c.; ½ oz., 15c.; oz., 25c. Ask for Special Price by the Pound.

Livingston's Rainbow Collection of Choice Annual Flowers, 50c

Consists of **One Full Size Packet** Each of the following grand annuals, and is sent free by mail for **Fifty Cents**. At regular prices it would cost you \$1.00.

Asters, *Simple's Giant Branching* Mixed; *Bachelor's Buttons*, *Giant Flowering Imperialis*, *Candytuft*, *Mixed Colors*; *Cosmos*, *Mammoth Perfection* Mixed; *Dianthus Pinks*; *Marigolds*, *French*; *Mignonette*, *Sweet*; *Nasturtium*; *Giant Pansy*, *Mixture*; *Petunia*, *Blotched and Striped*; *Phlox*, *Livingston's Special* Mixed; *Poppies*, *Livingston's Giant Double Mixture*; *Portulaca*, *Mixed*; *Scabiosa*, *Livingston's Large Flowering* Mixed; *Sweet Alyssum*; *Antirrhinum*, *New Giant Flowering*; *Sweet Peas*, *Gilt Edge Mixture*; *Zinnia*, *Livingston's Prize Mixture*.

18 packets for only 50 cents.

Bright Array Collection, 25c

A most brilliant flower garden for a very little money. **One full sized packet** each of the following 8 "Easy to Grow" Flowers for 25c.

Sweet Alyssum; *Asters*, *Peony-Flowered Perfection*; *Candytuft*, *Mixed Annual Sorts*; *Nasturtiums*, *Tall Climbing*; *Pansies*, *Giant Trimardeau*; *Phlox Drummondii*; *Sweet Peas*, *Gilt Edge Mixture*; *Zinnias*, *Prize Mixture*.

Reliable Lawn, Orchard and Garden Tools

Prices on this page f. o. b. Columbus, unless otherwise stated and subject to market change.

Swivel Blade Pruning Saw

The blade can be set at any angle. Atkins best grade saws—16 in. blades. No. 10, as illustrated, \$1.65, postpaid; No. 11 with tapering frame, \$1.60, postpaid.

Excelsior Weeder—Very useful for weeding seed beds, stirring soil in hot-beds, cold frames, etc. 15c., postpaid.

Lang's Weeder—Doz., \$2.25; each 25c., postpaid.

Garden Dibber—For planting bulbs, etc. Has hardened steel point. 40c., postpaid.

Steel Transplanting Trowel—First class for digging weeds and resetting plants. 5 in., 20c.; 7 in., 30c., postpaid.

Asparagus Knife—No tool equals it for removing dandelions, plantain, dock, etc., from lawns. Drop forged cutlery steel. 35c., postpaid.

The New Christy Garden Weeder has the famous scalloped cutting edge of the Christy Bread Knife. 20c., postpaid.

Hazeltine's Hand Weeder—Blade solid steel, tempered, 7/8-inch wide and 1/2-inch thick, sharpened on all edges. 25c., postpaid.

Trowels, Ordinary—5-in., 15c.; 6-in., 20c., postpaid.

Trowels, Solid Steel—6-in., 35c., postpaid.

Columbus Corn Sheller

Shells any size ear from pop-corn to large field corn. May be fastened to a board or on top of the fence. Always ready. \$1.25, not prepaid by express or freight.

Pruning Saw—Double Edge

One coarse and one fine, 18 inch blade. 90c., postpaid.

Van Ruyper's Glazing Points

Prevents glass from sliding. Made of galvanized steel wire. No. 2 for single-strength glass; No. 2 1/2 for double-strength. Box of 1000, 65c., postpaid.

Hot-bed Sashes

Best Cypress—3 1/4 x 6 ft., unglazed for 4 rows 8x10 glass. Each, \$1.55; 10 for \$15.00. Not prepaid.

Our sales of Hot-bed Sashes are increasing each season, so satisfactory do our customers find them.

Plant Bed Cloth

A protecting Cloth of Waterproof Fiber; excellent substitute for glass, late in season. All pieces are a yard wide and contain from 40 to 60 yards each. Heavy grade, per yard, 25c.; weight, 7 oz. Medium grade, per yd., 18c.; weight, 3 3/4 oz. Light grade, per yd., 12c.; weight, 1 1/2 oz., not prepaid.

Perfect Clinching Hose Mender

Easy to apply, no band required for 3/4 or 1/2-in. hose. We use the Clincher and consider it the best obtainable. Simply pound down the Clincher and you have a neat and permanent mend. 3 for 35c.; dozen, \$1.00, postpaid.

Neponsit Paper Pots

Are made of tough waterproof fiber paper unbreakable and the best pot made for starting plants in hot-beds or greenhouses and for shipping and marketing. For lightness and cheapness they have no equal.

2 1/4 inches.....	\$0 30	\$2 75	1000
2 1/2 inches.....	35	3 20	1000
3 inches.....	50	4 25	1000
3 1/2 inches.....	65	5 90	1000
4 inches.....	85	7 25	500
5 inches.....	1 30	11 90	500
6 inches.....	1 75	16 00	500

Clipper Grain and Seed Cleaner

No. 1, for general use, has 12 sieves (10 zinc), cleans grain and seeds of all kinds. Each \$28.00, not prepaid.

Send for Special Catalog of Clipper Mills.

Out O' Sight Mole Trap

Best Mole Trap ever offered, and only has to be tried to be appreciated. Can be used in hot-bed under sash. The secret of mole catching is a good trap and to know their habits. Full directions with each trap. \$1.00 postpaid.

Guaranteed. 9-inch, \$2.90; 10-inch, \$3.15, postpaid.

Common—Very strong. Best steel blade and excellent spring. 75c., postpaid.

Keen Cutter Pole Pruner—10 ft., \$1.00; 12 ft., \$1.25, not prepaid.

Cahoon Hand Broadcast Seeder

For sowing any grain or grass seed. Sows at a common walking gait 4 to 8 acres per hour. A saving of labor and one-third of the seed is effected by this machine. Reliable in all respects. Price \$4.00; weight 9 lbs. Not prepaid.

Little Giant Seeder

Strongest, Lightest and Easiest Running

Best and cheapest crank Seeder made in the quality of work done and durability. Will not get out of order nor be affected by dampness of the

weather. Distributes all kinds of fertilizer, land plaster, ashes and seeds. We have sold it for years with good satisfaction. No. 3 (Crank), \$1.50; weight, 6 lbs. Not prepaid.

McWhorter Fertilizer Distributer—For the practical and superior distribution of all commercial fertilizer. It distributes the fertilizer in a furrow, beside the growing crop, as a top dresser or as a broadcaster to any extent up to a uniform spread of over 2 feet, without removing or adding any part or loosening a bolt, and in any quantity from a few pounds to 40 or more pounds to the 100 yards of row. \$13.20, not prepaid.

All prices on this page are subject to change.

We have found the preparations listed on this page the very best. Directions for use are on each package. To protect your trees, flowers, shrubbery and vegetables from insects and blight, it is necessary to spray them—ask for our free spraying calendar if in doubt when to do it and what to use.

Reliable Spraying Solutions

APHINE

For destroying aphids (plant lice) on roses, sweet peas, nasturtiums, etc. A fine article. $\frac{1}{4}$ pt., 25c.; $\frac{1}{2}$ pt., 40c.; 1 pt., 65c.; 1 qt., \$1.00, postpaid; 1 gal., \$2.50, not prepaid.

ARSENATE OF LEAD PASTE

Used largely with Bordeaux Mixture for spraying potatoes and fruit trees. Sticks longer and no danger of burning the foliage as with paris green. 1 lb., 35c., not prepaid.

ARSENATE OF LEAD (Powdered)—Mixes with water almost instantly—one pound goes as far as two to three of paste—remains in suspension much longer. We have given a four-year test to the brand we carry and consider it unequalled. $\frac{1}{2}$ lb., 30c.; 1 lb., 55c.; 5 lbs., \$2.60; 10 lbs., \$5.00, not prepaid. Ask for price on larger quantities.

BLACK LEAF 40

Forty per cent Nicotine Sulphate. Highly recommended by the Experiment Stations as a spray for Black Aphids and sucking insects of this class. You cannot go wrong in ordering "Black Leaf 40" for sucking insects. 1 oz. makes 6 gallons of spray on outdoor vegetation. As a dip to destroy scab, ticks, lice and insect pests on sheep, cattle and hogs dilute 1 pound in 83 gallons water. One oz., 25c.; $\frac{1}{2}$ lb., 75c.; 2 lbs., \$2.50; 10 lbs., \$10.75, not prepaid.

BORDO-LEAD (Target Brand)

Kills leaf-chewing insects, and at the same time protects the crop against fungus diseases such as apple scab and potato blight. We advise our customers to use Bordo-Lead on their fruit trees, potato and tomato vines, cucumbers, melons, etc. It sticks and protects the foliage. All ready to use by adding cold water. Bordo-Lead will not only increase the crop, but will improve the quality. This combined spray saves mixing and if used before bugs or blight appear, it gives best results possible. 1 pound makes 5 gallons spraying solution. 1 lb., 35c.; 5 lbs., \$1.40; 10 lbs., \$2.50; 25 lbs., \$5.75, not prepaid.

QUICK BORDEAUX MIXTURE (Target Brand)

A superior article ready for immediate use for blight on flowers, vegetables and trees. Used largely with Arsenate of Lead for spraying potatoes and trees. 1 pound makes 5 gallons. 1 lb., 30c.; 5 lbs., \$1.00; 10 lbs., \$1.75, not prepaid.

FISH, OR WHALE OIL SOAP

Makes an excellent wash for trees and plants where insects and eggs affect the bark, and for smearing on trunks of trees to prevent worms from crawling up. Also used in combination with Black Leaf 40 in combating hard-to-conquer sucking insects. $\frac{1}{4}$ lb., 15c.; 1 lb., 30c.; 2 lbs., 55c., postpaid.

HELLEBORE

For the destruction of slugs, worms, caterpillars, etc. Loses its strength when exposed to the air a few days, making it safe to use when the vegetables or fruit are about ripe. $\frac{1}{4}$ lb., 25c.; $\frac{1}{2}$ lb., 40c., not prepaid.

HAMMOND'S SLUG SHOT

Non-poisonous; no danger to the person using it. It does not render vegetables or fruits on which it is applied injurious, and it is the best insect destroyer ever offered for the destruction of potato bugs, worms and all insects that chew. Especially valuable for fighting the green cabbage worm. We sell tons of it every year for this one purpose. It is simply dusted lightly on. 1 lb., 10c.; 5 lbs., 40c.; 10 lbs., 70c.; 25 lbs., \$1.70, not prepaid.

BARWELL'S PLANT GROWER

A highly concentrated odorless Plant Food especially prepared for house plants—ferns, palms, etc. It imparts a sturdier growth and fuller development. For flowering plants it gives a more brilliant, heavy, luxuriant bloom as well as lengthening the blooming season. So satisfactory do our customers find this that we have an increasing demand every year. A 50c box is sufficient for 15 ordinary house plants for one year. See directions on can. $\frac{1}{2}$ lb., 25c.; 1 $\frac{1}{2}$ lb., 50c., not prepaid.

BONE MEAL

Our Bone Meal is evenly ground and especially adapted for drilling. For lawns use 10 lbs. for 250 square feet. Price: 10 lbs., 50c.; 25 lbs., \$1.00; 50 lbs., \$1.50; 200-lb. bag, \$4.40.

Armour's 2-8-1—10 lbs., 50c.; 25 lbs., \$1.00; 50 lbs., \$1.50; 200-lb. bag, \$4.50.

Armour's 2-8-2—10 lbs., 60c.; 25 lbs., \$1.25; 50 lbs., \$2.00; 200-lb. bag, \$5.00.

LIME AND SULPHUR SOLUTION

An up-to-date remedy for San Jose scale and bark lice infecting fruit and shade trees. A superior fungicide and insecticide for Summer use. Qt., 30c.; $\frac{1}{2}$ gal., 50c.; gal., 80c.; 5 gals., \$2.75; 25 gal. keg, \$6.75; 50 gal. bbl., \$10.75, not prepaid.

POWDERED LIME AND SULPHUR

Mixes with water—becomes a liquid testing the same as standard liquid solutions. It is claimed that the brand we carry is the only powdered form that is exactly the same as standard liquid solutions and can with safety to the tree be used in combination with an arsenate as a summer spray. Equally effective as a dormant or summer spray without the disadvantage of bulk, weight, leakage, etc. 1 lb., 25c.; 5 lbs., 85c.; 10 lbs., \$1.50; 25 lbs., \$3.50; 50 lbs., \$5.75, not postpaid.

"NICO-FUME" LIQUID

Forty per cent "free nicotine." The best spray for greenhouses. The fumes help to kill the insects. One or two teaspoonfuls to the gallon of fresh water furnish an effective remedy against green aphids and thrips; for vaporizing, one-half ounce per 2,000 cubic feet furnishes a strong fumigation. "Nico-Fume" Liquid thus has the advantage of being employed both for spraying and fumigating. $\frac{1}{4}$ lb. tin, 50c.; 1 lb., \$1.50; 4 lbs., \$5.50; 8 lbs., \$10.50, not prepaid.

"NICO-FUME" TOBACCO PAPER

To use, "hang sheet from hole punched in one end, light lower end, blow out flame and let sheet burn." Eight or ten sheets for the ordinary greenhouse (100 ft. long by 20 ft. wide) will usually furnish a strong fumigation against green fly, etc. 24 sheet can, 85c.; 144 sheets, \$4.00; 288 sheets, \$7.50, all postpaid.

PARIS GREEN

Applied as a powder, it should be mixed with paste or flour, 10 parts to 1 part of Paris Green; in solution mix 1 lb. in 200 or 300 gallons of water. $\frac{1}{4}$ lb., 20c.; $\frac{1}{2}$ lb., 35c.; 1 lb., 65c.; 2 lbs., \$1.25, not prepaid.

FYROX (Bowkers)

A pasty substance used for leaf-eating insects and blight. It is really a Bordeaux and Arsenate of Lead combined and is excellent. Dilute 1 lb. to 5 gallons water. 1 lb., 35c.; 5 lbs., \$1.40; 10 lbs., \$2.50; 25 lbs., \$5.75; 50 lbs., \$10.75; 100 lbs., \$20.00, not prepaid.

SCALECIDE

Used for the destruction of the San Jose Scale. Dilute 1 gallon Scalecide in 15 gallons water. Scalecide does not clog nozzles, hose or pump and is pleasant to use. Use in the fall after leaves are off of trees and early in the spring before the buds start. Qt., 55c.; gal., \$1.35; 5 gals., \$5.00, not prepaid.

TARGET BRAND WEED KILLER

Keeps paths and roads free from weeds and grass. One gallon makes 50 gallons ready for use—enough for 150 yards of surface; applied with watering can. Directions on each can. By express or freight. 1 pt., 40c.; 1 qt., 60c.; 1 gal., \$1.75, not prepaid. Larger lots, special prices.

SPECIAL SUGGESTION

To have the necessary solutions for modern day summer spraying, it is only necessary to order two articles, viz: Bordo-Lead and Black Leaf 40. The Bordo-Lead for blight and chewing insects and the Black Leaf 40 for sucking insects (plant lice). By combining these two sprays, you take care of all three at once. It will pay you to always have these ready for use—Bordo-Lead and Black Leaf 40.

Fertilizers

Sheep Manure (Pulverized)—A pure natural manure and very nutritious for plants. For potting soil mix one part manure to six parts soil. For vegetable garden, place directly in hills or drills. It promotes a rapid, steady growth until maturity. Splendid top dressing for lawns. 5 lbs., 30c.; 10 lbs., 50c.; 25 lbs., \$1.00; 50 lbs., \$1.50; 100-lb. bag, \$2.25.

NITRATE OF SODA

For early vegetable crops it will produce wonderful results. As the market price of Nitrate is subject to frequent changes, our prices are also subject to change without notice. 1 lb., 15c.; 2 lbs., 25c.; 10 lbs., 90c.; 25 lbs., \$2.00; 50 lbs., \$3.75; 100 lbs., \$6.75.

To build up the fertility of your soil, we recommend the use of the legumes such as Clovers, Vetches, Soy Beans and Cow Peas, and do not fail to use the inoculators as directed on page 59 for the best results.

Prices subject to change
without notice

Sprayers, Nozzles etc.

Prices f. o. b. Columbus un-
less otherwise stated

Proper equipment is just as necessary for satisfactory results in spraying as solution used. A good sprayer makes the solution good farther and much more effective. It makes it spread and stick like the dew instead of running off like rain drops. Get the right size sprayer. It will pay for itself very soon in solution saved and satisfaction.

Improved Vermorel Nozzle

A good general purpose nozzle and the best for white-washing. Pushing the plunger cleans any obstruction out of discharge opening. Made of Brass. Furnished with 5 caps for coarse or fine work. Price, postpaid, 80c.

Non-Clog 45° Nozzle

Made of brass. Does not clog. Throws a fine mist. Discs furnished for small and large capacity sprayers. It has no horns—nothing to catch, drip or clog. The most up to date and satisfactory nozzle on the market today. Price, postpaid, 90c.

Non-Clog Straight Nozzles

Same construction as the 45° angle nozzle. Both can easily be taken apart and cleaned when necessary. A special removable brass screen prevents the clogging. Price, postpaid, 85c.

Brown Continuous Sprayer

Sprays fly oils and disinfectants as well as the regular spraying materials. An extra nozzle is furnished for spray-

No. 101, Heavy Glass Jar Sprayer

Works easier, stays in order better and lasts longer than any sprayer of its class. Length 22 inches. With quart Mason jar; Brass Tubes; zinc jar top; non-rustable plunger rod; 80c, postpaid.

Special Tin Sprayer

A special type designed for use in gardens, houses, stables and fields. It does good work and has every feature of the larger sprayers, except lasting qualities.

No. 112—19 in. long, holds 1 qt., 50c., postpaid.

No. 122—14 in. long, holds 1/2 pt., 40c., postpaid.

Auto Spray No. 5

A new sprayer that has made good. Every customer we have sold this sprayer to the last two years (since it was first manufactured) has been highly pleased. It works so easy, stays in order so well, and throws such a fog-like spray that we decided to give all our customers an opportunity to own one. A special nozzle for washing windows, carriages, fighting fires, etc.; another long distance nozzle

for spraying trees and a fine nozzle for all work near at hand such as garden truck, bushes and potatoes are furnished. Pump is made entirely of Brass—can be used without knapsack by placing in any vessel such as a barrel, tub, or bucket. Pump, hose, nozzle and strainer, \$4.25; Galvanized Knapsack Tank, \$3.25; curved extension rod for field spraying, 50c.

"Hardie" Bucket Pump

This is the only bucket pump in the market that is giving entire satisfaction. Built exactly like the large barrel pumps. It is capable of developing a 200-lb. pressure and maintaining a 100-lb. pressure while spraying, with 35 strokes to the minute, and will discharge 30 gallons of liquid per hour.

One 5-gallon heavy wooden bucket, 3 feet best 1/2-inch hose, 1 spraying lance 18 inches long, 1 spraying nozzle, \$9.30. 8-foot extension rod, 70c.

Meyers Bucket Pump

This pump has a place between the hand sprayer and barrel pump. Being made of brass, with brass ball valves, will not rust or corrode. Has maleable iron foot rest, jet agitator, improved brass air chamber and two nozzles

for coarse and fine spray. This is a genuine Meyers product and in a different class than many so-called "bargain" bucket pumps. Price \$4.50 and worth it. 8 ft. extension rod, 70c.

A successful hand sprayer for poisons and disinfectants in powder form.

Ball valve arrangement allows no dust to reach the plunger head—2 inch can screw for filling—holds 1 qt.—22 inches long—aluminum finish. 90c., postpaid.

No. 108
Powder Sprayer

Binks Sprayer No. 21

A strong, compact, well built, portable sprayer for use around the garden, lawn and orchard. Easily operated by man or woman or child. It is decidedly satisfactory for spraying, whitewashing and applying mineral paint. It saves time, labor and material. Large steel wheels allow it to be easily moved over rough or soft ground.

All working parts of bronze and brass—holds 12 gallons—mechanical agitator. Comes complete as illustrated with 10 feet high pressure hose, spray pipe, stop cock and nozzle, \$18.00.

Improved Auto-Spray No. 1

One of the oldest and most reliable compressed air sprayers on the market. It is only necessary to fill the tank about three-fourths full of liquid, pump up the air pressure (about eight to twelve strokes) and go ahead. Two pumpings will empty the tank. The Auto-Pop Non-Clog Nozzle gives a large volume of fine spray by simply closing the hand on the lever—releasing the hand stops it immediately. Highly recommended for spraying potatoes, vegetables and shrubbery.

Holds 3 gals.—the new anti-clogging device prevents clogging—has a powerful all brass air pump with patented cam device to prevent leakage of air. Comes complete as illustrated with shoulder strap, hose and auto-pop nozzle.

No. 1B, Brass Tank, \$8.00. No. 1D, Galvanized Tank, \$5.75. Two ft. Brass Extension Rod with Elbow for spraying under side of leaves, 80c.

S, indicates Seeds

INDEX

B, Bulbs

Page	Page	Page	Page
AbroniaS. 81	Corn, Sweet,S. 6, 7, 24, 25, 26	Japanese HopS. 91	PinksS. 88
AbutilonS. 81	Corn, Field,S. 70, 71, 72, 73	Job's TearsS. 86	PlatycodonS. 98
AcrocliniumS. 81	Corn, PopS. 7	Kaffir CornS. 74	Pop CornS. 7
AdlumiaS. 81	Corn, KaffirS. 7	KaleS. 30	PoppyS. 100
AgeratumS. 81	Cornflower AsterS. 102	Kenilworth IvyS. 91	PortulacaS. 100
AlfalfaS. 63	Corn SaladS. 21	KochiaS. 91	PotatoesS. 75, 76
Allegheny VineS. 81	CosmosS. 86	Kohl RabiS. 30	Potatoes, SweetS. 76
AlyssumS. 81	Cow PeasS. 64	Kudzu VineS. 91	Primula (Primroses)S. 99
AmaranthusS. 81	CressS. 21	Lady's EardropsS. 89	PuerariaS. 91
AntirrhinumS. 82	CucumberS. 27, 28	Lady's SlipperS. 83	PumpkinS. 45
AquilegiaS. 82	CyclamenS. 85	LantanaS. 92	PyrethrumS. 98
ArabisS. 81	Cypress VineS. 85	LarkspurS. 92	RadishS. 46, 47, 48
ArtichokeB. 64	DahliaS. 86	LavenderS. 92	Ragged SallorS. 85
AsparagusS. 12	DaisiesS. 87, 102	Lawn Grass SeedS. 92	RapeS. 66
" OrnamentalS. 81	DandelionS. 28	3rd Cover PageS. 30	ResedaS. 93
AsperulaS. 81	DaturaS. 87	LeekS. 30	RhubarbS. 45
AstersS. 78, 79, 80	DelphiniumS. 87	LettuceS. 31, 32, 33	RicinusS. 101
Baby BreathS. 90	DianthusS. 88	LinumS. 92	RosesS. 101
Bachelor's ButtonS. 85	DigitalisS. 87	LunariaS. 92	Ruta BagaS. 51
Balloon VineS. 94	DillS. 30	LobeliaS. 92	SageS. 30
BalsamS. 83	DimorphothecaS. 88	Love-in-a-MistS. 97	SalpiglossisS. 101
Balsam AppleS. 82	DolichosS. 88	LychnisS. 92	SalsifyS. 50
Balsam PearS. 82	Dusty MillerS. 85	Mangel WurzelS. 17	SalviaS. 101
BarleyS. 69	EcheveriaS. 89	MarigoldS. 93	SavoryS. 30
BeansS. 4, 13, 14, 15	EchinocystisS. 107	Marsh MallowS. 90	ScabiosaS. 102
Beans, SoyS. 65	Egg PlantS. 29	Marvel of PeruS. 92	Scarlet RunnerS. 102
BeetS. 16, 17	EndiveS. 30	MatricariaS. 89	Scarlet SageS. 101
Beet, Mangel & SugarS. 17	Endive, FrenchS. 21	MaurandyaS. 92	SchizanthusS. 102
BegoniaS. 82	EschscholtziaS. 89	Melon, MuskS. 7, 34, 35	Sensitive PlantS. 102
Bellis (Daisies)S. 87	Farm SeedsS. 60 to 76	Melon, WaterS. 36, 37	Shasta DaisyS. 102
Blanket FlowerS. 89	FertilizersS. 110	MignonetteS. 93	SmilaxS. 102
Borecole (Kale)S. 30	FeteritaS. 74	MillettS. 68	SnapdragonS. 82
BroccoliS. 12	FeverfewS. 89	MimulusS. 92	SorghumS. 74
Broom CornS. 66	Field CornS. 70, 71, 72, 73	Monkey FlowerS. 92	Soy BeansS. 65
Brussels SproutS. 12	Flower SeedsS. 77 to 108	MoonflowerS. 94	SpeltzS. 69
BuckwheatS. 64	Forget-Me-NotS. 95	Morning GloryS. 94	SpinachS. 50
Burning BushS. 91	Fountain GrassS. 97	Mountain FringeS. 81	SquashS. 49, 50
Butterfly RunnerS. 99	Four O'ClockS. 92	Mourning BrideS. 102	StocksS. 102
BeansS. 99	FoxglovesS. 87	Mushroom SpawnS. 38	StokesiaS. 102
CabbageS. 4, 18, 19, 20	FuchsiaS. 89	Musk PlantS. 92	StrawflowerS. 90
Cabbage, ChineseS. 4	GaillardiaS. 89	MustardS. 38	Sudan GrassS. 68
CalendulaS. 83	GarlicB. 30	MyosotisS. 95	Sugar CaneS. 74
California PoppyS. 89	GeraniumS. 90	NasturtiumS. 95, 96	Summer CypressS. 91
CalliopsisS. 83	GilliflowerS. 102	NicotianaS. 97	SunflowerS. 64
CampanulaS. 83	GodetiaS. 90	NigellaS. 97	Sun PlantS. 100
Canary Bird VineS. 83	GourdsS. 90	NitraginS. 59	Sweet AlyssumS. 81
CandytuftS. 84	GrainsS. 69	Novelties and SpecialtiesS. 4 to 11	Sweet PeasS. 103, 104, 105, 106
Canterbury BellsS. 83	GrassS. 60, 61	OatsS. 69	Sweet SultanS. 85
Cardinal ClimberS. 94	Grass, LawnS. 61	OkraS. 38	Sweet WilliamsS. 106
CarnationS. 84	Grasses, OrnamentalS. 97	OnionS. 39, 40	Sweet WoodruffS. 81
CarrotS. 22	GypsophilaS. 90	Onion SetsB. 40	Swiss ChardS. 17
Castor Oil BeansS. 101	HelianthusS. 102	Ornamental GrassesS. 97	ThunbergiaS. 107
CauliflowerS. 21	HelichrysumS. 90	Osage OrangeS. 67	ThymeS. 30
CeleriacS. 23	HeliotropeS. 90	Oyster Plant (Salsify)S. 50	ToolsS. 109
CeleryS. 5, 22, 23	HerbsS. 30	Painted TongueS. 101	TomatoS. 52, 53, 54, 55, 56
CelosiaS. 84	HibiscusS. 91	PansyS. 97, 98	Tree SeedsS. 67
CentaureaS. 85	HollyhocksS. 91	Paris DaisyS. 85	TurnipS. 51
Chickory WitloofS. 21	HopS. 91	ParsleyS. 41	ValerianaS. 107
ChrysanthemumS. 85	Hop, JapaneseS. 91	ParsnipS. 41	VerbenaS. 107
CinerariaS. 85	HumulusS. 91	PeanutsS. 74	VetchS. 67
CloverS. 62, 63	HunnemanniaS. 89	PeasS. 42, 43	VincaS. 107
CobaeaS. 85	Hyacinth BeanS. 88	Peas, CowS. 64	VioletS. 107
CockscombS. 84	IberisS. 84	Peas, FieldS. 74	WallflowerS. 107
CoixS. 86	ImpatiensS. 91	PepperS. 44, 45	WheatS. 69
ColeusS. 85	InsecticidesS. 110	PetuniaS. 99	Wild CucumberS. 107
CollardsS. 21	InoculatorS. 59	PeriwinkleS. 107	XeranthemumS. 107
Collection, DollarS. 21	IpomoeaS. 94	PhaseolusS. 99	ZinniasS. 108
Collection, FlowerS. 108		PhloxS. 99	
ColumbineS. 82			
ConvolvusS. 94			
CoreopsisS. 83			

THE LIVINGSTON SEED CO., Columbus, Ohio

DO NOT WRITE HERE		THE AMOUNT ENCLOSED	
Date.....	191.....	Ship by { MAIL { EXPRESS { FREIGHT {	No.
Name			Date received
Post Office			Gathered by
Box....., R. F. D. No.	, State		Checked by
Street No.			Wrapped by
			Date sent
			P.

By (Express or R. R. Co.)

PLEASE WRITE NAME AND ADDRESS VERY PLAINLY IN THE ABOVE

Are you a Florist?

Are you a

Market-Gardener?

THE LIVINGSTON SEED COMPANY
give no warranty, express or implied, as
to description, quality, productiveness, or
any other matter of any seeds, bulbs or
plants we send out, and we will not be in
any way responsible for the crop.

PLEASE WRITE NAME AND ADDRESS VERY PLAINLY IN THE ABOVE

[illegible]

DON'T FORGET
TO PLACE A
CENT STAMP
HERE

P.O.

State.....

"FAMOUS FOR TOMATOES"

COLUMBUS,

OHIO.

NAMES OF VARIETIES WANTED
PLACE ONE VARIETY ONLY TO A LINE

PRICES	
Dollars	Cents

Bushels	Pounds	Ounces	Packets
1	32	16	1
2	64	32	2
3	96	48	3
4	128	64	4
5	160	80	5
6	192	96	6
7	224	112	7
8	256	128	8
9	288	144	9
10	320	160	10
11	352	176	11
12	384	192	12
13	416	208	13
14	448	224	14
15	480	240	15
16	512	256	16
17	544	272	17
18	576	288	18
19	608	304	19
20	640	320	20
21	672	336	21
22	704	352	22
23	736	368	23
24	768	384	24
25	800	400	25
26	832	416	26
27	864	432	27
28	896	448	28
29	928	464	29
30	960	480	30
31	992	496	31
32	1024	512	32
33	1056	528	33
34	1088	544	34
35	1120	560	35
36	1152	576	36
37	1184	592	37
38	1216	608	38
39	1248	624	39
40	1280	640	40
41	1312	656	41
42	1344	672	42
43	1376	688	43
44	1408	704	44
45	1440	720	45
46	1472	736	46
47	1504	752	47
48	1536	768	48
49	1568	784	49
50	1600	800	50
51	1632	816	51
52	1664	832	52
53	1696	848	53
54	1728	864	54
55	1760	880	55
56	1792	896	56
57	1824	912	57
58	1856	928	58
59	1888	944	59
60	1920	960	60
61	1952	976	61
62	1984	992	62
63	2016	1008	63
64	2048	1024	64
65	2080	1040	65
66	2112	1056	66
67	2144	1072	67
68	2176	1088	68
69	2208	1104	69
70	2240	1120	70
71	2272	1136	71
72	2304	1152	72
73	2336	1168	73
74	2368	1184	74
75	2400	1200	75
76	2432	1216	76
77	2464	1232	77
78	2496	1248	78
79	2528	1264	79
80	2560	1280	80
81	2592	1296	81
82	2624	1312	82
83	2656	1328	83
84	2688	1344	84
85	2720	1360	85
86	2752	1376	86
87	2784	1392	87
88	2816	1408	88
89	2848	1424	89
90	2880	1440	90
91	2912	1456	91
92	2944	1472	92
93	2976	1488	93
94	3008	1504	94
95	3040	1520	95
96	3072	1536	96
97	3104	1552	97

THE LAWN PROBLEM SOLVED

by the use of

Livingston's Capitol Lawn Grass Seed

SOWN IN SPRING OR FALL

IT contains only the highest grade of grasses suitable for the purpose of making a beautiful, durable, lasting lawn. It germinates quickly and roots deeply. This enables it to withstand the intense heat of summer and the hard cold of winter, showing a beautiful, rich green. It contains no annual grasses for making a quick show, to the detriment of a permanent lawn, but has only those which are lasting and hardy. When a lawn is once established from our seed, it lasts for years. From six to eight weeks' time is all that is required to form a close, thick turf of rich, velvety green. We have made the formation of lawns a careful study, and many of the finest lawns and grass plots all over the United States were made from Livingston's Capitol Lawn Grass Seed. For a perfect and enduring lawn of closely interwoven, firm, elastic turf, which will flourish under varied conditions of soil and climate and show a luxuriant rich green growth throughout the year, plant Livingston's Capitol Lawn Grass Seed.

Quantities to Use. One lb. for 400 sq. ft.; 5 lbs. for 2,000 sq. ft.; 10 lbs. for 4,000 sq. ft.; 25 lbs. for 10,890 sq. ft. ($\frac{1}{4}$ acre); 34 lbs. for 14,550 sq. ft. ($\frac{1}{2}$ acre); 50 lbs. for 21,780 sq. ft. ($\frac{3}{4}$ acre); 100 lbs. for 43,560 sq. ft. (1 acre).

For Renewing Old Lawns. Use about one-half the quantity given in above directions.

Capitol Lawn Grass Seed is the cheapest as well as the best lawn grass seed offered. While 14 lbs. of lawn grass seed is usually considered a bushel, this will weigh 20 lbs. to the bushel. We sell by the pound instead of quart. This method is very much to the advantage of the purchaser, as a pound of grass seed measures over $1\frac{1}{2}$ quarts. **Lb. 55 cts., 3 lbs. \$1.50, postpaid; 5 lbs. \$2.00, 10 lbs. \$3.75, 25 lbs. \$8.75, 100 lbs. \$30.00, 500 lbs. \$125.00.**

Shady Place Mixture

On nearly all lawns there are shaded, bare, and unsightly spots on which the owners have difficulty in getting a stand of grass. For such places this mixture is adapted. It is composed of grasses which naturally grow in shaded places. They are the finest and most costly of all grasses. If the soil is covered with moss or seems "sour" and out of condition, rake off the surface and apply hydrated lime at the rate of 100 lbs. to 1,000 square feet; this will sweeten the soil. Then dig and prepare the lawn as directed below. **Lb. 75 cts., 3 lbs. \$2.10, postpaid; 5 lbs. \$3.25, 10 lbs. \$6.25, 25 lbs. \$15.00.**

Kentucky Blue Grass

Many prefer plain Blue Grass to a mixture, and it cannot be denied that it produces a beautiful and lasting lawn. It takes longer, however, to get established. For fuller description see page 60. Fancy clean seed. **Lb. 55 cts., 3 lbs. \$1.50, postpaid; 5 lbs. \$2.00, 10 lbs. \$3.75, 25 lbs. \$8.75, 100 lbs. \$30.00, 500 lbs. \$125.00.**

Special Quotations. We are always pleased to quote special prices to parks, institutions, golf clubs, and others who require Lawn Grass Seed in large quantities.

PRICES SUBJECT TO MARKET CHANGES

Directions for Making a Lawn

As early as possible in the spring and again in September in the latitude of Columbus spade or plow the ground 10 or 12 inches deep. If the soil is poor, apply bone meal, wood ashes, pulverized sheep manure, or peat humus, separately or in combination, immediately after it is spaded, before it is raked. Well-rotted stable manure is good, but it often contains weed seeds. Should the soil be acid or sour, scatter carbonate of lime on it at the rate of 1 lb. to 5 sq. ft. Now rake the soil until completely pulverized; then roll.

Sow the Best Seed. It is always cheapest in the end. Use quantity according to directions. Distribute by hand as evenly as possible, going both ways across the plot. Cover the seed by raking lightly; then roll.

When the grass has become well rooted, use a good sharp mower, set

"Quick Grower" Lawn Seed

We prepare a special mixture that will give quicker results than our Capitol Lawn Seed, yet it makes a good lasting lawn. If you have tried others and failed, give this a fair trial, and we feel sure you will be pleased with the results. 1 lb. to 300 sq. ft. **Lb. 55 cts., 3 lbs. \$1.50, postpaid; 5 lbs. \$2.00, 10 lbs. \$3.75, 25 lbs. \$8.75, 100 lbs. \$30.00, 500 lbs. \$125.00.**

Tennis-Court Mixture

A mixture composed of low-growing hardy grasses suitable for grounds of this kind. **Lb. 75 cts., 3 lbs. \$2.10, postpaid; 5 lbs. \$3.25, 10 lbs. \$6.25, 25 lbs. \$15.00.**

Golf-Link Mixture

We make a mixture of grasses suitable for the purposes of the golf links, so it will stand rough usage. We can also prescribe for links located on poor or rich, dry or wet soils, telling which grass will best suit each location.

We are at your service in helping you to work out the best procedure for starting a new lawn or for fixing up an old one.

to cut about $1\frac{1}{2}$ inches high. Never allow the grass to become so high that the mower will take off the first joint. Mow at least once a week during good growing weather. Rake the clippings off when they are long. When dry and hot, avoid cutting too close. During dry spells thoroughly soak once a week in the evening after the sun is off the lawn.

In the early spring every lawn should be carefully rolled so as to press back to its place any turf that has been heaved by the freezing and thawing.

Old lawns out of condition will be greatly benefited by applying the proper quantity and kind of seed and fertilizer thoroughly raked in before this rolling.

The Livingston Seed Co.

Columbus, Ohio

LIVINGSTON'S
NEW TOM THUMB
POP-CORN

PACKET 10¢
½ LB. 25¢

LIVINGSTON'S
GOLDEN SURPRISE
FIELD CORN

ALFALFA
THE GREATEST FEED ON EARTH