Historic, Archive Document

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

2,27

34th Year

1918

JEFFERSON- RATEKIN SEED COMPANY

"The House of Good Seeds"

THE KEY TO
THE
HARVEST

OCT 8 1918

GOLDEN BANTAM
SWEET CORN
10¢ PKT.

MAGI QUEEN
EARLY SPECIAL
TOMATO
10¢ PKT.

WHITE
SILVER SKIN
ONION
10¢ PKT.

20 DAY WHITE RADISH
10¢ PKT.

JEFFERSON, IOWA.

G. W. MACKAY
MANAGER

JEFFERSON, IOWA

January 1st, 1918

TO OUR FRIENDS AND CUSTOMERS:

Here is our Seed Catalog and Farm Guide for 1918. We are handing it to you with the sincere hope that it will be beneficial to you as well as an inducement to favor us with your orders for High Grade Seeds.

Many of our customers last year were confused regarding our connection with the Ratekin Seed House of Shenandoah, Iowa, and for the benefit of these friends, as well as all others, we wish to emphasize the fact that we were in no way connected with that house. We purchased their retail mailing list, Garden Seed stocks and part of their equipment, but did not assume any liabilities of that Company. The old Ratekin Seed House of Shenandoah is no longer in the seed business and our customers in ordering should bear this in mind and be careful to address all orders to JEFFERSON. Many of our customers last season sent their orders to Shenandoah which caused considerable delay in filling them. All orders should be addressed to the Jefferson-Ratekin Seed Co., Jefferson, Iowa.

We wish also to emphasize the fact, that the policy of this House, is first, last, and always to serve the customer in the best way possible. Our policy, "that the customer is always right" settles any controversy immediately.

Our organization is comprised of men not only experienced in the seed business, but thoroughly schooled in our policy of honesty-fair dealing -- and that the customer must be satisfied, and that if any doubts arise, our patrons get the benefit. Bearing always in mind that "He profits most who serves best" this policy has built our business to such proportions that we are now serving thousands of pleased and satisfied customers.

Our seeds are all fresh, new crop grown and may be relied upon to give you profitable results under ordinary conditions. Many of our Farm Seeds are either grown by us or under contract for us from seed which we personally know to be of absolutely pure stock. Our Garden Seeds are grown for us by experts in the different localities where the best seed can be produced. All are grown from pure, carefully selected stock and the greatest care taken in cleaning, sorting, etc., to keep them absolutely pure and unmixed. In sending you our catalog, it is our aim to put before you the VERY BEST of everything in the seed line.

In confidence to our friends and customers, we wish to state that seeds of all varieties are scarce this year and prices are sure to advance before spring. Now is the time to order your seeds to be sure of having them in time to plant. Why hesitate in sending us your orders? We ship all seeds on ten days approval of customer and if not satisfactory, back goes your money. Our customer is always right. Our reputation back of every seed sent out by us.

Before making up your order if there are samples of seeds you would like to see, write us. We will consider it a favor to send you samples of Farm & Field seeds, also shelled samples of Seed Corn free of charge. We are here to serve you, and furnish your wants, why not send us your orders and plant dependable seed?

Sincerely and Cordially yours,
JEFFERSON RATEKIN SEED COMPANY.

By G. W. Mackay
General Manager

DON'T BE SCARED INTO PLANTING SOUTHERN CORN. WE HAVE PLENTY OF
HIGH-GERMINATING NORTHERN GROWN SEED CORN. SEE LIST BELOW:

Farmers Special Price List

READ CAREFULLY. THESE PRICES SUPERSEDE THOSE GIVEN IN CATALOG
ON ITEMS NAMED.

Planting season is now rapidly approaching. Farmers and Truck Growers everywhere will have to buy seeds this year. Seed Crops of many varieties failed to mature last season and shortages are numerous. This applies to all varieties. Our supplies, as well as those of other houses, are limited, but we will take care of your wants as long as our stock lasts. In view of these conditions, NOW IS THE TIME TO ORDER YOUR SEEDS, while you can obtain your choice and pick of the best. Don't delay another day. Shipments are moving slow. Take our catalog, make up your order and send it in today. You will then have your seeds in time to plant. Never in the history of the seed business have seeds been so scarce. Don't delay your order on account of prices. Prices will be higher and seeds scarcer, later on.

TIME LIMIT. Note that these prices hold good until March 1, 1918, only. If you do not buy before that time, write for new prices. We reserve the right to cancel these prices when stock on hand is sold. All seeds are quoted f. o. b. Jefferson, customer to pay the freight or express charges. No extra charge for bags, all seeds sold, bags, "weighed in." Prices, strictly net, spot cash, no discount. Write us for quality prices.

SEED CORN. The Seed Corn situation is getting more serious day by day. There is scarcely a farmer who saved his seed. The demand is enormous. We have a limited amount of the varieties listed below, but it is going fast. Get your order in at once. **PRICES BELOW SUPERSEDE THOSE GIVEN IN OUR CATALOG.**

TESTED SEED CORN

	Per Pk.	Per Bu.
Diamond Joe Early White.....	\$3.50	\$12.00
Iowa Silver Mine.....	3.00	10.00
Boone County White.....	3.00	10.00
Silver King.....	3.50	12.00
Iowa No. 302 Yellow Dent.....	3.50	12.00
Iowa Gold Mine.....	3.00	10.00
Mammoth Yellow Dent.....	3.00	10.00
Pride of Nishna.....	3.50	12.00
Reid's Yellow Dent.....	3.00	10.00
Early Learning.....	3.50	12.00
Pride of North.....	3.50	12.00
Hickory King.....	2.75	9.00
Yellow Fodder.....	2.50	8.00
White Fodder.....	2.50	8.00
Eureka Ensilage.....	2.75	9.00
Bloody Butcher.....		Sold Out
Improved Calico.....		Sold Out
Flint Varieties.....		Sold Out

SEED GRAIN

	Per Pk.	Per Bu.
OATS —New Kherson.....	.50	1.50
Big Banner 100 bushel.....	.50	1.50
Texas Red Rust Proof.....	.60	1.75
Iowa No. 103.....	.55	1.60
Swedish Select.....	.55	1.60
Early Champion.....	.50	1.50
Silver Mine.....	.50	1.50
WHEAT —Marquis Spring.....	1.15	3.50
Macaroni or Durum Spring..	1.15	3.50
SPELTZ or EMMER	.90	3.00
BARLEY —Success Beardless ..	1.25	4.00
White Hullless.....	1.40	4.50
Oderbrucker.....	.90	3.00
Manshury.....	.90	3.00
RYE —Mammoth Spring.....	1.25	4.00
White Wonder Winter.....	.90	3.00
BUCKWHEAT —Japanese.....	1.00	3.75
Silver Hull.....	1.00	3.75
SEED FLAX	1.50	5.00
COTTON SEED —Long Staple..	1.25	4.00
Brown's No. 1.....	1.25	4.00

SEED POTATOES

	Per Pk.	Per Bu.
Early Ohio.....	1.25	4.00
Early Six Weeks.....	1.25	4.00
New Majestic.....	1.25	4.00
Mammoth Prize.....	1.25	4.00
Rural New Yorker.....	1.25	4.00
Irish Cobbler.....	1.25	4.00
Bliss Triumph.....	1.25	4.00
Eureka.....	1.25	4.00
Early Rose.....	1.25	4.00
Carman No. 3.....	1.25	4.00
Sir Walter Raleigh.....	1.25	4.00

CLOVER AND GRASS SEEDS

	Per Pk.	Per Bu.
CLOVER		
Medium Red.....	\$5.50	\$20.00
Mammoth Red.....	5.75	21.00
Alsike.....	5.00	19.00
Alfalfa.....	4.50	17.00
White or Dutch.....	.70	per lb.
Crimson.....	5.00	19.00
White Blossom Sweet.....	5.75	21.00
TIMOTHY	1.50	5.00
TIMOTHY and ALSIKE MIX-		
TURE , (50 lbs. per bu.).....	2.75	10.50
MILLET —German.....	.90	3.00
Japanese Millet.....	.90	3.00

LIGHT GRASSES

(Sold on the basis of 14 lbs. per Bu.)

	Per Pk.	Per Bu.
Ky. Blue Grass.....	1.35	4.75
English Blue Grass.....	1.15	4.25
Red Top.....	.95	3.50
Orchard Grass.....	1.50	5.25
Rye Grass.....	.85	3.00
Meadow Fescue.....	1.15	4.25
Bromus Inermis.....	1.10	4.00
Oat Grass.....	1.75	6.50
Pasture Mixture.....	.30	per lb.
Lawn Grass Mixture.....	.30	per lb.

FORAGE AND FODDER CROPS

	Per Pk.	Per Bu.
CANE		
Orange and Amber Fodder....	1.75	6.00
Milo Maize.....	1.40	5.00
Peterita.....	1.40	5.00
Kaffir Corn.....	1.40	5.00
Sand Vetch.....	4.00	15.00
Dwarf Essex Rape.....	2.75	10.00
Pencilaria.....	5.75	10.00
Jerusalem Corn.....	2.00	7.00
Shallu.....	1.75	6.00
Broom Corn.....	1.25	4.50
Sunflower Seed.....		15c per lb.
SUDAN GRASS		30c per lb.
BILLION DOLLAR GRASS		20c per lb.

ONION SEED

	Per Pk.	Per Bu.
Red Globe.....		\$4.50 per lb.
Yellow Globe.....		4.50 per lb.
White Globe.....		6.00 per lb.

We have high grade seed of all kinds and can supply you with any amount of seed you may need if favored with your order at once. If you do not find quoted just what you want, ask for special quotations. We can serve you to advantage if favored with your orders without delay.

JEFFERSON-RATEKIN SEED COMPANY

JEFFERSON, IOWA

(Over)

"BILLION DOLLAR GRASS"

The Most Valuable of all Annual Grasses Grown.

ESPECIALLY VALUABLE FOR SILO AND FOR FEEDING GREEN—BETTER THAN THE BEST CORN FODDER.

From Japan, that mysterious country, which is furnishing (and has furnished in the past) many rare farm seeds, comes this remarkable grass—remarkable in a hundred different ways, for there is nothing known to man today that is more luxuriant, more prolific, more marvelously rich and vigorous in growth than Billion Dollar Grass. It will produce a hay crop in from six to ten weeks, anywhere, and if sown the first of May will be ready to cut the middle of July for hay, attaining the height of (according to the richness of the soil and warmth) from 5 to 7 1-2 feet. It is pre-eminently the grass to sow if you are going to be short on hay for your horses, mules, cattle and other stock.

BETTER THAN CORN FOR SILO—Cows with both Billion Dollar Grass and corn before them will take Billion Dollar Grass first and consume it without waste; when put upon Billion Dollar Grass they increase in milk and fall off when feed is changed to corn. An ideal ensilage mixture is made of two parts Billion Dollar Grass and one part of Soja Beans, or Cow Peas, mixed when filling the silo. This mixture forms a complete balance ration for milch cows without grain, oil cake, etc.

CULTURE—Everybody reading the above regarding this wonderful grass will wish to know its best method of cultivation. If you wish very fine, leafy hay, and have strong, rich ground, sow at the rate of twenty pounds per acre, but if your soil is but moderately rich, then sow at the rate of fifteen pounds per acre. This latter is the amount we ourselves sow, and find same very satisfactory. It can be sown at different times of the year; especially if you wish same for pasturage, or if you are short of hay. It can be sown in April, in May, in June, in July, and even in August, and will return glorious, heavy crops.

FEEDING VALUE—Here is where Billion Dollar Grass comes into play. Prof. Williams of the United States Department of Agriculture says: "Already widely grown as a hay crop, it deserves more general use for sowing, as this grass is of particular value for feeding to dairy cattle, young stock and sheep."

FOR FEEDING GREEN—All rich, luxuriant growing grasses and forage plants must be fed in the green state moderately at first. Billion Dollar Grass is one of those rich, magnificently luxuriant growing grasses; therefore you should turn in hogs and cattle and sheep and horses at first moderately, after they have had a good feed somewhere else, and then gradually accustom them to this. It is on the same plan as hungry stock turned into rich clover; they would find harm. Turn them in at first moderately, and you can soon keep them in permanently.

FOR SEED—Let Billion Dollar Grass get thoroughly ripe; cut and thresh as you would timothy. The seed is rich and nutritious. Poultry, geese and turkeys all relish Billion Dollar Grass in the green state, and keep healthy and fresh on the seed thereof when fed during the fall and winter months.

Hogs and their families. The hogs grunt and give that contented swag of the tail when they can pasture on Billion Dollar Grass, and then if you wish to fatten them, give them rations of the seed. Remember, this grass will produce from forty to sixty bushels of seed per acre. This fed, either ground or coarse, makes excellent food, although it is inclined to be slightly laxative.

Cows, calves and other stock look with pleasure on the Billion Dollar Grass pasture and feed in contentment upon its luxuriant swath and glory in Billion Dollar Grass hay, especially if fed along with Cow Pea Hay or Pea Oat Hay or grain. Try it this season to make hay out of it, fill your silos therewith and watch the cattle eat it.

Horses, mules and the like jump over a four-foot fence to get at the Billion Dollar Grass, and they will fatten and keep healthy thereon. They will eat the hay as eagerly as cattle.

A REMARKABLE GROWER—It is truly the most marvelous grower, the most luxuriant stouter that we have ever seen. Imagine a field sown to Billion Dollar Grass, with every spear of it over 6 feet tall, yielding from 26,000 to 50,000 pounds of as rich, green fodder as the world has ever seen. Men talk about hard times, but positively hard times must vanish on every farm where Billion Dollar Grass is sown. You can get two or three rich crops from the same annually; and then a big lot of fodder besides. If you sow early you will get from 26,000 to 50,000 pounds of fodder, which you can put in your silo or cure for hay. Billion Dollar Grass will quickly spring up again and give you another yield that will astonish the country. This can be cut again for hay; then the field will give you a pasturage all fall, and horses and hogs and sheep and cattle and poultry will eat it greedily.

IF YOU SOW PLENTY OF BILLION DOLLAR GRASS YOUR WIFE CAN DRESS IN SILK AND SATIN AND YOU CAN TAKE YOUR FAMILY AND FRIENDS OUT RIDING IN AN AUTOMOBILE! YOU CAN ROLL IN WEALTH AND LUXURY, BILLION DOLLAR GRASS IS A GOLD MINE TO THOSE WHO SOW IT ABUNDANTLY.

PRICE OF BILLION DOLLAR GRASS—Postpaid: package 10c; lb. 35c; freight or express: 10 lbs., (enough to sow one acre) \$3.00; 30 lbs., \$5.40; 50 lbs., \$8.00; 100 lbs., \$14.00; bags free.

JEFFERSON-RATEKIN SEED COMPANY

JEFFERSON, IOWA
(Over)

You don't have to use this order sheet. You can order any way you wish, but using this will save us both some bother and lessen mistakes. Better keep an exact copy for future reference. Be sure to give your NAME and ADDRESS.

ORDER SHEET FOR SEEDS

Every order, large or small, will receive prompt and careful attention.

JEFFERSON-RATEKIN SEED CO., Jefferson, Iowa.

All members of one family should order under one name.

Name _____

Post Office _____ Shipping Point _____

State _____ County _____

R. F. D. No. _____ P. O. Box No. _____ Street No. _____

Date of Order _____ Amount enclosed _____

HOW SHALL WE SHIP?

☐ Parcel Post
(Postage enclosed)

☐ Express

☐ Freight

Name of Express Co. _____ Name of R. R. Co. _____

If there is no freight agent at your shipping point, it will be necessary for you to send money to prepay freight charges. If there is an agent, you can pay freight when the shipment reaches you. It is only necessary to prepay charges where there is no agent at your station. The charges are the same.

Quantity	Name of Seeds and Articles Wanted	Price	Total

JEFFERSON-RATEKIN SEED CO.
Jefferson, Iowa

I herewith enclose you 15c for which I understand you will send me one packet of each the two vegetables named on the reverse side of this slip. Below are a few names of my friends who I believe will be glad to receive your catalog and printed matter.

My Name _____

Address _____

ADDRESS

POST OFFICE

STATE

R.F.D. or ST. No.

—BE SURE TO WRITE NAME AND ADDRESS PLAINLY—

Terms and General Information About Ordering

The attention of our customers is respectfully called to the following directions, which will, if followed, be an aid to the purchaser as well as ourselves.

Your Name and Address We make this our first suggestion, for it is very important that you sign your name and write your full address plainly on every order you send us. Orders often reach us where the address is omitted and very often the name and address are both lacking. This causes delay, for we cannot fill orders if we have not the address of the buyer. Give your postoffice address, name of county and state, and if articles are ordered that go by express or freight, give the railway station to which you wish the goods shipped. If you have a post office advisable to write your name the same way each time you write us, as it will enable us to locate previous correspondence without delay. At times it is impossible for us to know that letters come from the same family, for instance a first order may be signed "John Brown," the second order "J. A. Brown," the third order signed by his wife, "Mrs. Anna Brown," and the fourth by his son or daughter "William Brown" or "Rose Brown." Write all remarks or communications on a sheet of paper separate from your order.

CATALOGUE INDEX—To quickly find any article in this catalog refer to the index in back of book.

How to Make Out an Order Select from this Seed Book the articles you desire and write your order plainly on our order sheet enclosed in this book. Read over your order and make sure that all is clear and complete. State clearly whether it is a packet, pint, quart, etc., that is wanted. Look over the prices carefully to see if you have them correct. On completion of your order, add the total amount sent for seeds by the packet and ounce, and

For your premium you may select 25 cents worth extra in packets for every dollar remitted for packets and Ounces only.

Free Premiums We allow every customer to select his or her own premiums on the basis of 25c **WORTH OF SEEDS EXTRA** for every dollar remitted for Packets and Ounces. This premium must be selected in packets and ounces only at time order is sent in.

This discount does not apply on seed orders in larger quantities no to collections of vegetables and flower seeds.

If You are a Market Gardener raising garden truck for SALE and your annual purchases of bulk seed amount to \$5.00 or \$10.00 or more, you are entitled to Market Gardeners' prices, and we will quote you these special prices on request if you will make up complete list and send to us. Our seed stocks are especially adapted to the market gardener's use, as they are grown under the most careful supervision from especially selected strains, and are rigorously tested for vitality. Their extremely high quality make profits certain.

Our Terms are Strictly Cash With Order

We send nothing C. O. D. Every item entering into the Seed Business is spot cash. Cash buys the best of everything. When cost of seed, postage and other necessary expense is paid good, high-grade seeds are sold on a very small margin. It is not big profits on a single order, but the large volume of business we do that enables us to make you bargain prices and give you the most for your money. Our constant aim is to make highest quality the first consideration and, next to put our prices as low as good seed can be sold.

Delivery The point of delivery of all heavy goods is on cars at Jefferson, Iowa. When we quote a delivered price at your station it means we prepay the freight or express charges.

Order Early The best time to order is just as soon as you receive this catalogue, as we can always give your orders more of our personal attention if they come in before the rush of the spring.

What We Guarantee We guarantee the safe delivery of all goods ordered from us, whether by mail, express or freight. That all money sent to us for seeds shall reach us if sent by registered letter, postoffice or express money order, or bank draft made payable to our order, or your personal check, if you have the money back of it to make it good. That your orders will be filled promptly and with care. Keep a copy of your order. Sometimes people think they have ordered articles which they have omitted, and blame us for not sending them. Please be careful to sign your name, postoffice, state and rural route plainly.

About Warranting We thoroughly test all our seeds and nothing is sent out which we do not believe to be of good, strong germination and that will grow under any reasonable conditions; still crops are contingent upon so many conditions, etc., over which we have no control, including soil, weather, time and manner of planting, cultivation, etc., that we cannot be responsible for the product and give no warranty, expressed or implied, as to description, quality, quantity or productiveness of any seed sent out by us, and every order for seeds named in this catalogue will be executed on these conditions only, and if the purchaser does not accept the seeds on these terms and conditions they are to be returned any time within 10 days. It however, must be plain to everyone who gives the matter the slightest thought, that it is to our best interest to send out only such seed stock as will not only grow, but prove true to name and description. However, we have so much confidence in our seeds that we hereby agree to refill any retail order for vegetable or flower seeds free of charge should they prove otherwise than as we represent them. We know of no responsible seed firm in the world which guarantees seeds any further than this.

Prepaid Stations Many of our customers live at points known as prepaid stations, where there is no agent. In such cases you should always send money enough to prepay freight charges through to such points, otherwise we will ship to nearest station where there is an agent.

Premiums Each year we put up thousands of packets of new or particularly desirable varieties of seeds for free distribution to our customers. We will send these out with the seeds ordered by you and will treat you liberally in this respect. We hut try to please our customers.

Seeds by Mail We pay the postage on all Vegetable and Flower seeds sold by packet, ounce or pound unless otherwise stated. If you wish large quantities of seeds sent by mail, add postage at parcel post rates given on page 2.

About Prices Seeds of many varieties are scarce this year and prices will be higher as the season advances. We would advise placing your order at once in order to secure the best seeds at lowest prices. Prices named herein are those prevailing at the time our catalog goes to press and are subject to change without notice as the market fluctuates. Crop failures are numerous this season and prices will probably fluctuate considerably later on. For this reason, we will issue a special price list at regular intervals. Should you hold your order until later, please write us for price list before ordering, or in case you do not care to wait for price list, send us your order and if prices have changed, we will use our best judgment as to whether to send you more or less seeds. In case the difference is considerable, we will write you. In all cases you will get the full value of your money.

Free Samples We are always glad to send you free samples of Corn, Grasses or other Field Seeds for testing purposes. You are not imposing on our good nature when you ask for samples for we know the quality of our seed will bring us your big orders.

See Parcel Post, Express and Freight Charges on Next Page.

Express and Parcel Post Rates

For the convenience and information of those who wish to order in larger quantities of seeds than we have quoted "postpaid" herein. Bear in mind, however, that we pay the postage or express charges,

unless otherwise noted, on all packet, ounce, $\frac{1}{4}$ lb., $\frac{1}{2}$ lb., pound, half pint, pint and quart quantities of garden and flower seeds, also on all farm seeds where quoted by pound or more "POSTPAID" at prices quoted per lb. prepaid.

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 Jefferson, and its rural routes Postage required	1st Zone Not over 50 miles from Jefferson Postage required	2d Zone 51 to 150 miles from Jefferson Postage required	3d Zone 151 to 300 mi. from Jefferson Postage required	4th Zone 301 to 600 mi. from Jefferson Postage required	5th Zone 601 to 1000 mi. from Jefferson Postage required	6th Zone 1001 to 1400 mi. from Jefferson Postage required	7th Zone 1401 to 1800 mi. from Jefferson Postage required	8th Zone Over 1800 miles from Jefferson 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	39c	.56	.73	.91	1.08
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	1.24	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						

Parcel Post and Express rates easy to understand, but if in doubt ask your Postmaster or Express Agent.

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.

Express Rates from Jefferson, Ia., to Points Named Below:

	10 lbs.	15 lbs.	100 lbs.		10 lbs.	15 lbs.	100 lbs.		10 lbs.	15 lbs.	100 lbs.
Albany, N. Y.....	\$0.42	\$0.54	\$2.48	Fort Scott, Kan.....	\$0.36	\$0.44	\$1.84	Pittsburgh, Pa.....	\$0.39	\$0.48	\$2.14
Aberdeen, Miss.....	.41	.51	2.37	Galesburg, Ill.....	.30	.36	1.35	Philadelphia, Pa.....	.39	.50	2.25
Akron, Ohio.....	.36	.45	1.95	Grand Island, Neb.....	.32	.39	1.50	Parsons, Kan.....	.36	.44	1.84
Amarillo, Texas.....	.45	.58	2.78	Guthrie, Okla.....	.41	.52	2.40	Phoenix, Ariz.....	.70	.96	5.29
Atlanta, Ga.....	.44	.56	2.67	Helena, Mont.....	.57	.77	4.05	Pine Bluff, Ark.....	.70	.96	5.29
American Falls, Idaho ..	.60	.81	4.28	Hastings, Neb.....	.32	.39	1.50	Pueblo, Colo.....	.43	.56	2.63
Butte, Mont.....	.57	.77	4.05	Henderson, Ky.....	.36	.44	1.84	Peoria, Ill.....	.32	.39	1.50
Boston, Mass.....	.44	.57	2.70	Helena, Ark.....	.39	.50	2.25	Parkersburg, W. Va.....	.38	.47	2.07
Beatrice, Neb.....	.29	.34	1.20	Jacksonville, Ill.....	.31	.37	1.39	Rochester, N. Y.....	.39	.49	2.22
Buffalo, N. Y.....	.30	.49	2.18	Kansas City, Mo.....	.30	.36	1.35	Sioux Falls, S. D.....	.27	.32	1.05
Binghampton, N. Y.....	.41	.52	2.40	Lafayette, Ind.....	.34	.42	1.69	Selma, Ala.....	.43	.55	2.59
Baltimore, Md.....	.42	.54	2.55	Louisville, Ky.....	.36	.45	1.92	San Francisco, Calif.....	.81	1.12	6.42
Birmingham, Ala.....	.42	.53	2.44	Lexington, Ky.....	.37	.46	1.99	Shreveport, La.....	.46	.60	2.89
Boise, Idaho.....	.66	.90	4.95	Montgomery, Ala.....	.43	.55	2.59	St. Paul, Minn.....	.29	.34	1.20
Chicago, Ill.....	.32	.38	1.47	Macon, Ga.....	.46	.60	2.89	St. Louis, Mo.....	.33	.39	1.54
Cairo, Ill.....	.35	.42	1.77	McAllister, Okla.....	.41	.52	2.40	Seattle, Wash.....	.75	1.04	5.85
Cincinnati, Ohio.....	.36	.45	1.92	Madison, Wis.....	.32	.38	1.47	Terre Haute, Ind.....	.33	.41	1.65
Cleveland, Ohio.....	.36	.45	1.95	New Madrid, Mo.....	.36	.45	1.88	Topeka, Kan.....	.30	.36	1.35
Clarksburg, W. Va.....	.39	.49	2.22	New York, N. Y.....	.43	.56	2.63	Texarkana, Ark.....	.45	.58	2.78
Cheyenne, Wyo.....	.41	.52	2.40	New Orleans, La.....	.48	.63	3.08	Toledo, Ohio.....	.36	.44	1.84
Dayton, Ohio.....	.36	.45	1.92	Nashville, Tenn.....	.52	.65	2.22	Tulsa, Okla.....	.36	.45	1.95
Detroit, Mich.....	.36	.45	1.92	Okolona, Miss.....	.39	.50	2.25	Valparaiso, Ind.....	.32	.38	1.47
Denver, Colo.....	.42	.54	2.52	Omaha, Neb.....	.26	.29	.87	Wichita, Kan.....	.36	.45	1.95
Dallas, Texas.....	.46	.60	2.89	Oklahoma City, Okla.....	.41	.52	2.40	Wheatland, Wyo.....	.39	.50	2.25
Enid, Okla.....	.38	.48	2.10	Ogden, Utah.....	.56	.75	3.90	Des Moines, Iowa.....	.30	.30	.50
Fairbault, Minn.....	.30	.35	1.24	Portland, Ore.....	.77	1.06	6.00	Richmond, Va.....	.45	.58	2.78
Fort Wayne, Ind.....	.34	.42	1.69								

Through a misunderstanding about cost of transportation charges, largely due to misrepresentation by those who would prevent you from taking advantage of ordering your seeds direct from the grower, we want you to know that the freight charges should not cause you any uneasiness.

Whether you buy from us, your home dealer or elsewhere **YOU PAY THE FREIGHT.** The only difference is the dealer includes it in the selling price; also includes a profit on it, which you can save and otherwise get the benefit of by sending direct to us. **THE FREIGHT RATE IS THE SAME TO HIM AS TO YOU.** Thus you save the profit on first cost and freight, and have the assurance of getting new seeds direct from the grower.

Freight Rates. How to Figure

railroad will haul a freight shipment, no matter how small or short the distance. This rate varies from 25 cents over each railroad to 40 cents, but where a shipment consists of enough to absorb the minimum rate into the 100-pound rate the shipment will take the 100-pound rate. For this reason and in order to obtain the cheapest and lowest classification a freight shipment should weigh at least 100 pounds. Less shipments will go at minimum charge.

The express system is quick and economical

when the weight is under twenty-five pounds, and in some cases even as much as fifty or sixty pounds. Any express office in the United States can be reached from Jefferson, Iowa, within sixty hours and less from time shipment is started, and if you are in a hurry the express system is the best to ship by. On a shipment based on twenty-five pounds at special seed rate varies from 30 cents to 75 cents, dependent on distance. Larger shipments according to weight.

Rates are based
on a minimum

LIST OF FREIGHT RATES FROM JEFFERSON, IOWA, PER 100 POUNDS AT THIS DATE TO POINTS NAMED BELOW.

ALABAMA. Birmingham.....\$0.94 Montgomery......96 Fruitdale......97 Mobile......67 Tuscaloosa......98 Decatur......81 Selma......96	ILLINOIS. Centralia......34 Canton......285 Chicago......31 Aurora......31 Bushnell......285 Beardstown......285 Galesburg......285 Galva......285 Litchfield......31 Monmouth......285 Ottawa......31 Peoria......285 Quincy......285 Rock Island......285 Savannah......31 Carthage......285 Decatur......283 Champaign......31 Carmi......34 McLaeansboro......475 Sidell......31 Olney......34 Cairo......34 Murpheysboro......34 Bloomington......285 Paxton......31 Jacksonville......285 Springfield......285	KENTUCKY Gracy......759 Greenbrier......629 Russellville......769 Bowling Green....679 Lebanon......639 Henderson......446 Cynthiana......709 Hopkinsville......759	MASSACHUSETTS. Fall River......686 Springfield......686 Worcester......686 Boston......686	OHIO Savona......409 Canton......462 Zanesville......472 Sandusky......462 Akron......462 Troy......436	TENNESSEE Paris......69 Union City......59 Jackson......69
ARIZONA. Phoenix......1.71 Prescott......1.71	ARKANSAS. Hoxie......62 Hope......1.01 Fort Smith......69 Paragould......62 Blytheville......67 Brinkley......75 Stuttgart......81 Little Rock......81 Pine Bluff......81 Helena......67 Bentonville......56 Arkansas City....85 Texarkana......1.01 Fayette......1.13 De Vaile Bluff....79 Siloam Springs...56 De Queen......1.09 Ashdown......1.01	LOUISIANA. Shreveport......92 Pearl River......79 New Orleans......67	NEBRASKA. Chester......544 Culbertson......718 Columbus......496 Alliance......84 Beatrice......35 Ashland......31 Broken Bow......658 Edgar......55 Fairmont......508 Grand Island......556 Holdrege......634 Hastings......54 Kearney......61 Lincoln......31 Omaha......183 Norfolk......47 Superior......57 Emett......451 Tecumseh......31 Wymore......39 York......50 Fremont......31	OKLAHOMA. Vinita......55 Wagoner......64 Muskogee......64 McAlister......69 Bartlesville......55 Osage......65 Tupelo......86 Guthrie......82 Atoka......86 Oklahoma City...82 Tulsa......65 Okmulgee......69 Chickasha......82 Enid......82 Hugo......90 Howe......77	TEXAS. Dennison......1.06 St. Joe......1.00 Mineola......1.06 Dallas......1.06 Denton......1.06 Hillsboro......1.06 Temple......1.06 Georgetown......1.06 Austin......1.06 San Antonio......1.06 Galveston......1.06 Fayetteville......1.06 Houston......1.06 Cisco......1.06 Henriette......1.06 Brownwood......1.06 Waco......1.06 Harris......1.06 Corsicana......1.06 San Angelo......1.06 Abilene......1.06 Amarillo......1.13 Dublin......1.06 Gallegher......1.06 Paris......1.06 Stephenville......1.06 Beaumont......1.06
CALIFORNIA. Los Angeles......2.00 Sacramento......2.00 San Francisco......2.00 San Jose......2.00 Redding......2.00	COLORADO. Denver......65 Greeley......65 Pueblo......65 Kit Carson......77 Trinidad......65 Leadville......1.22 Fort Morgan......72 Holyoke......72 Boulder......65 Brush......72	MARYLAND. Baltimore......616 Cumberland......56	NEW YORK. Rochester......543 Churchville......543 Syracuse......577 Utica......607 Rotterdam Jct...629 Cornwall......646 New York City...646 Mohawk......629 Troy......629 Buffalo......493 Albany......629 Poughkeepsie....646 Binghamton......577	OREGON. Portland......2.00 Salem......2.00	UTAH. Ogden......1.30 Salt Lake......1.30 Mante......1.45 Bingham......1.46
CONNECTICUT. Bridgeport......686 Hartford......686 New Milford......686 Litchfield......686 New Haven......686 Waterbury......686	INDIANA. Effner......415 Adams......394 Albany......407 Fort Wayne......407 Indianapolis......388 New Albany......399 Terre Haute......367 Huntington......407 Vincennes......362 Vernon......399 Muncie......399 Lafayette......383 Evansville......388 Martinsville......388 Greencastle......378 Valparaiso......415 Frankfort......388 Michigan City....415 Goshen......415	MICHIGAN. Jackson......433 Adrian......433 Ray City......472 Detroit......433 Grand Rapids......433 Kalamazoo......433 Lansing......433 Ann Arbor......433 Brown City......472 Chippewa......493 Manistee......64 Cadillac......535	PENNSYLVANIA. Pittsburgh......493 Johnstown......543 Weaver......493 Philadelphia......626 Bedriord......56 Erie......493 Gettysburg......616 Scranton......626 Blairstown......523 Lewisburg......616	VIRGINIA. Abingdon......686 Lynchburgh......616 Richmond......616 Virginia City......686	
CANADA. Chatham......493 Rothwell......493 St. Thomas......493 Toronto......493 Montreal......646 Quebec......726 Loudon......493	KANSAS. Concordia......42 Atchison......27 Garnett......425 Fort Scott......345 Great Bend......72 Leavenworth......27 Beloit......58 Parsons......425 Wichita......67 Newton......60 Topeka......39 Manhattan......39 Emporia......495 Winfield......69 Abilene......54 Dodge City......72 Garden City......72 Olathe......345	MISSISSIPPI. Artesia......95 Okolona......93 Corinth......74 Tupels......81 Aberdeen......85 Meridian......84 Starkville......85	NORTH CAROLINA. Charlotte......69 Fayetteville......89 Washington......82 Wilmington......73	RHODE ISLAND. Providence......686 Woodsocket......686	WEST VIRGINIA. Clarksburg......513 Grafton......513 Parkersburg......493
DELAWARE. Dover......646 Farmington......641 Newark......626 Wilmington......626	KENTUCKY. Louisville......399 Hematete, R. R. Sta., Eddyville.51 Owensburg......399 Lexington......609 Paducah......36 Hickman......57 Ashland......472 Madisonville......779	MISSOURI. Delta......54 Dexter......60 New Madrid......70 Malden......68 Carrollton......58 Cameron......58 Kansas City......27 Laclede......57 Maywood, advise Co. or R. R. Napier......58 St. Joseph......27 Osborn......58 St. Louis......31 Hannibal......285 Brunswick......56 Moberly......54 Kirksville......54 West Plains......74 Higginsville......295 Neosho......425 Eve......345	NORTH DAKOTA. Fergus Falls......511 Fargo......44 Bismark......79 Grand Forks......61	SOUTH DAKOTA. Aberdeen......48 Armour, C. M. & St. P. Canton, C. M. & St. P. Gettysburg......577 Chamberlain, C. M. & St. P. Vermilion, C. M. & St. P. Yankton......335 Sioux Falls......275 Huron......44 Watertown......36 Pierre......552 Deadwood......89 Rapid City......85	WISCONSIN. Madison......31 Chippewa Falls...38 Prairie du Chien C. M. & St. P. La Crosse......28 Manitowoc......31 Milwaukee......31 Wausau......31
GEORGIA. Atlanta......1.02 Brunswick......1.04 Savannah......1.04 Macon......1.02	IDAHO. American Falls...1.45 Boise......1.61 Spencer......1.38	MONTANA. Miles City......97 Livingston......1.366 Butte......1.366 Helena......1.366	OHIO. Chillicothe......441 Cincinnati......399 Cleveland......462 Columbus......441 Dayton......409 Defiance......423 Lima......433 Portsmouth......457 Toledo......433 Xenia......436 Youngstown......472 Eldorado......409 Newark......462 E. Mandale......423 Versailles......436 Washington C H. Bluffton......441 Irononton......472	TENNESSEE. Princeton Jct......748 Pond......798 Tenn. Ridge......80 Milan......67 Nashville......62 Memphis......61 Gallatin......823 Hartsville......91 Mayton......748	WASHINGTON. Tacoma......2.00 Spokane......1.71 Pasco......1.71 Seattle......2.00

OFFICE FORCE, WHERE ORDERS ACKNOWLEDGED, BOOKED, AND MADE READY FOR SHIPMENT
In charge of R. H. Thorpe

Efficiency in the Office

The above picture gives you a general view of the office. It is here your orders are acknowledged and booked and every detail looked after to see that you are given the best attention possible. Our offices are light and sanitary, and our employees work under the most pleasant conditions.

Mr. R. H. Thorpe, himself a business systematizer of exceptional ability, and a man of wide experience in the seed business, is in charge of the office force.

He has selected his assistants with the greatest care, and under his able management hundreds of orders are booked daily. All orders are carefully recorded and filed for future reference where they can be referred to at a moment's notice.

Much of our success is due to the efficiency of our office force, and the accuracy and care with which orders are handled. Our office is one of the most modern to be found in any business, being thoroughly equipped with the latest and best office appliances for the handling of a large and growing mail order business.

Visit us at any time and you will be greatly impressed with the efficient manner with which the orders are handled, each member of the office force having a given duty to perform, so that your order is passed along without confusion or delay. This means pleasant and satisfactory relations with our patrons.

WHERE GARDEN SEED ORDERS FILLED, SHOWING PART OF OUT-GOING MAIL FOR ONE DAY.

Garden Seed Department

Some idea of the magnitude of our garden seed business may be had from a glance at the above picture which shows only a part of our outgoing mail for one day.

Thousands of orders are handled through this department, and great care must be exercised in filling orders of this nature, as errors could easily be made in handling such a large number of orders daily.

This department is conducted by a seed man of long experience, and orders are carefully inspected before mailing, so you are assured of receiving good, healthy seed at all times.

Owing to the system effected in handling orders through this department, we are able to fill your order the same day it is received, which assures you the promptest service obtainable.

This service, in addition to the choicest of seeds on the market today, is responsible for our wonderful growth which has made the Jefferson-Ratekin Seed Company one of the largest and most successful in the country.

We are prepared to care for your needs promptly. Mail or wire orders today. You will be more than pleased with the attention you will receive.

Our goods are guaranteed—you take no chance. Could anything be fairer?

\$300.00 IN PRIZES FOR CASH CLUB ORDERS

Many of our customers sent us large club orders last season. Many more wrote us asking if we gave prizes for club orders and stating they could sell lots of our seeds in their immediate neighborhoods. For these reasons, we are going to offer inducements to our many friends and customers who wish to sell our seeds, but instead of offering cheap premiums as many houses do, we are going to give you CASH PRIZES. Cash buys the best of everything and we believe that the money will be more welcomed by our contestants than any premiums we could offer. We have tried to arrange our prizes so they will be fair to everyone. All orders must be taken at prices given in this catalog or price lists which we may issue from time to time.

Club No. 1

For the largest combination club order consisting of everything we handle as listed in our catalog, the following prizes will be given:

For the largest club order.....	\$35.00
For the second largest order.....	25.00
For the third largest order.....	15.00
For the fourth largest order.....	10.00
For the fifth largest order.....	5.00

You will be surprised and pleased to find how easy it is to get club orders for our seeds. Many of your friends and neighbors have been getting our catalog and ordering seeds from us for years. Most of them will be planning on ordering again this year and will be glad to give you their order and help you win one of our cash prizes.

All you need to do to enter this contest is to write us, stating that you wish to enter our Club order contest and we will immediately send you order blanks and return envelopes and information showing you how to take big orders. There are no rules or catch-ups entering in this contest, other than stated here.

The contest is open until July 1, 1918. Each order sent in will be carefully recorded and credit given to contestant. It will not be necessary for you to bold your orders and send them in at one time. You may send them anytime, bowever it will be better to send them the same day taken as we can then make prompt shipment of all orders. If we have appointed you as our Club Agent in your locality, your name will be on our books and credit will be given you for each order as sent in. Each order should be taken on a separate order blank. Cash must accompany each and every order, collect from your friends and remit us by money order or check.

We will send out each order you send us, in a separate package direct to the person you have taken the order from. All you have to do is to take the orders and we will send them by Parcel Post, Freight or Express according to size of order. It will not be necessary for you to distribute the orders to your customers.

\$30.00 IN CASH FOR NAMING OUR NEW TOMATO.
SEE PAGE 10

Club No. 2

For the largest club order consisting only of Garden and Flower Seeds, the following prizes will be given.

For the largest club order.....	\$35.00
For the second largest order.....	25.00
For the third largest order.....	15.00
For the fourth largest order.....	10.00
For the fifth largest order.....	5.00

Club No. 1

\$90.00 in Cash Prizes for the Best Garden Grown from our \$1.50 Home Garden Collection

First Prize.....	\$35.00
Second Prize.....	25.00
Third Prize.....	15.00
Fourth Prize.....	10.00
Fifth Prize.....	5.00

Of course you are going to raise a garden. Why not win a Cash Prize on your garden this year?

This contest is open to everyone, the only conditions are as follows: Mention when ordering that you wish to be a contestant for our Garden Growing Contest. The size of the garden is limited to one-tenth of an acre—of course it can be smaller. A strict account must be kept of all vegetables raised and the value of same. A sworn statement must be sent us by September 1, 1918, showing the amount you have saved in money by having your garden, giving a list of the varieties planted and date of planting, also a statement of the amount made on each variety and its value. You can determine the value of your vegetables by what you would have to pay for them if buying at retail prices.

The person whose garden pays the best will be awarded the first prize of \$35.00; the second best, \$25.00; the third best, \$15.00; the fourth best \$10.00; the fifth best, \$5.00.

Be sure and take a picture of your garden when at its best. We will publish prize winners' photographs and pictures of their gardens.

See list of seeds included in \$1.50 collection on next page. Compare it in value with any other collection ever offered. If you do not wish to enter contest with this collection select seeds of any variety you desire to the amount of \$1.50. Order today—enter this contest and win a cash prize.

Every year we give away thousands of dollar's worth of FREE SEED. Every order for Garden Seed sent out by us, will contain one or more Packets of Free Seed.

Vegetable and Flower Collections

Our Home Garden Collection No. 1

1.50 Gets This Complete Collection Delivered Free at Your Door

38 best varieties of Vegetable Seeds, including nine $\frac{1}{8}$ pint packages of Beans, Peas and Sweet Corn.

Order this collection and win a prize for best garden as given on opposite page.

The Biggest and Best Bargain Ever Offered by Any Seed House

$\frac{1}{8}$ pint Beans, Improved Golden Wax.
 $\frac{1}{8}$ pint Beans, Long Yellow Six Weeks.
 $\frac{1}{8}$ pint Beans, Kentucky Wonder.
1 large packet Beet, Early Eclipse.
1 large packet Beet, Improved Long Blood.
1 large packet Cabbage, Early Jersey Wakefield.
1 large packet Cabbage, Autumn King.
1 large packet Carrot, Danvers Half Long.
1 large packet Celery, Golden Self Blanching.
1 large packet Cucumber, White Spine.
1 large packet Cucumber, Chicago Pickling.
 $\frac{1}{8}$ pint Sweet Corn, Peep o' Day.
 $\frac{1}{8}$ pint Sweet Corn, Evergreen.
 $\frac{1}{8}$ pint Pop Corn, Queens Golden.
1 large packet Egg Plant, Black Beauty.
1 large packet Endive.
1 large packet Lettuce, Early Curled Simpson.
1 large packet Lettuce, Improved Hanson.
1 large packet Muskmelon, Osage.
1 large packet Watermelon, Coles Early.
1 large packet Watermelon, Kleckly Sweet.
1 large packet Onion, Red Wethersfield.
1 large packet Onion, Yellow Glohe.
1 large packet Parsley.
1 large packet Parsnip, Hollow Crown.
 $\frac{1}{8}$ pint Peas, Alaska.
 $\frac{1}{8}$ pint Peas, Gradus.
 $\frac{1}{8}$ pint Peas, Telephone.
1 large packet Peppers, Bull Nose.
1 large packet Pumpkin, Pie.
1 large packet Radish, Improved Chartier.
1 large packet Radish, Icicle.
1 large packet Salsify, Mammoth Sandwich Island.
1 large packet Spinach, Bloomdale.
1 large packet Squash, Hubbard.
1 large packet Tomato, Earliana.
1 large packet Tomato, Matchless.
1 large packet Turnip, Purple Top.
This collection is already put up in sealed packages and cannot be changed. Not subject to any premiums or discount offered elsewhere in our catalog.

Our Kitchen Garden Collection No. 2

25 Best Garden Vegetables, Delivered Postpaid, for \$1.00

Compare this value with any other collection offered by other seedsmen.

1 large packet Beans, Golden Wax.
1 large packet Beans, Kentucky Wonder.
1 large packet Beet, Early Dark Beauty.
1 large packet Cabbage, Jersey Wakefield.
1 large packet Cauliflower, Snowball.
1 large packet Carrot, Danvers Half Long.
1 large packet Celery, Golden Self Blanching.
1 large packet Cucumber, White Spine.
1 large packet Sweet Corn, Peep o' Day.
1 large packet Egg Plant, Black Beauty.
1 large packet Leek, London Flag.
1 large packet Lettuce, May King.
1 large packet Muskmelon, Emerald Gem.
1 large packet Watermelon, Kleckleys Sweet.
1 large packet Onion, Prizetaker.
1 large packet Onion, Red Wethersfield.
1 large packet Pepper, Bull Nose.
1 large packet Peas, Alaska.
1 large packet Peas, Gradus.
1 large packet Pumpkin, Pie.
1 large packet Radish, Icicle.
1 large packet Radish, French Breakfast.
1 large packet Tomato, Earliana.
1 large packet Tomato, New Stone.
1 large packet Turnip, Purple Top.

A total of 25 large sized packets sent postpaid for \$1.00. If ordered from catalog would cost \$1.60.

This collection is put up for mailing and cannot be changed.

Our Half Dollar Collection No. 3

As an inducement to those who have never tried our garden seed collections we are offering the following trial collection. Twelve full sized packets of new crop vegetable seeds for 50 cents.

1 large packet Cabbage, Sure Head.
1 large packet Beet, Early Turnip.
1 large packet Carrot, Oxheart.
1 large packet Bean, Valentine.
1 large packet Lettuce, Hanson.
1 large packet Cucumber, White Spine.
1 large packet Watermelon, Tom Watson.
1 large packet Onion, Prizetaker.
1 large packet Radish, Icicle.
1 large packet Tomato, Magi Queen.
1 large packet Muskmelon, Osage.
1 large packet Turnip, Purple Top.

OUR FLOWER SEED COLLECTION AND OFFERS

Have you plenty of Flowers about your home? If not, why not? Wouldn't you like to have nice flower beds about your home in 1918. Flowers beautify and make the home attractive as nothing else can do, except little children. A man or woman who lives in a home surrounded by flowers and shade trees feels a satisfaction and contentment of life, that the occupant of a home without such surroundings cannot possibly feel. By offering you the following collections, we make it easy for everyone to have beautiful flowers at very little cost.

Our Introductory Collection No. 4

7 Large Packets, 25 Cents, Postpaid.

1 packet, New Daisy.
1 packet, Morning Glory.
1 packet, Petunia.
1 packet, Adonis.
1 packet, Verbena.
1 packet, Dianthus.
1 packet, Aster.

For 25 cents, we will send the above packets, postpaid. No changes allowed in this collection. All collections are put up for mailing before our busy time is on us, which allows us to offer them to you at such low prices.

Lewiston, Ill., June 25, 1917.

Gentlemen—I ordered one of your Big Banner Flower Seed Collection last winter and I wish you could see the splendid flower beds which I now have. I have been supplying all my neighbors with beautiful flowers and everyone of them declare their intentions of ordering one of your collections another year. Your seeds are the best I ever saw. Put me down as a life long customer.

MRS. C. E. LONG.

Our Big Banner Half Dollar Collection No. 5

16 Large Packets, 50 Cents, Postpaid.

1 packet Fine Mixed Asters.
1 packet Sweet Alyssum.
1 packet Ageratum.
1 packet Antirrhinum, Mixed.
1 packet Balsam, Rose Flowered.
1 packet Candytuft, Empress.
1 packet Canterbury Bell.
1 packet Chrysanthemum.
1 packet Cosmos, Fine Mixed.
1 packet Dianthus, Superb Mixed.
1 packet For-Get-Me-Not.
1 packet Marigold.
1 packet Mignonette.
1 packet Daisy.
1 packet Pansy, Mixed.
1 packet Mixed Sweet Peas.

For 50 cents, we will send the above full-sized packets, postpaid. No changes will be allowed in this collection.

Famous Iowa 103 Oat Iowa's Great New Sensational Early Oat

FIELD OF IOWA 103 OATS GROWN FOR US BY J. M. BAKER, JEFFERSON, IOWA

The Iowa 103 has created a greater sensation than any oat ever introduced. A new production from the Iowa Experimental Station in 1913, it soon gave promise of being the greatest early oat in existence and in 1914 and 1915 established themselves by winning the "Sweepstakes on all Oats" at The International Dry Farming Congress. It is undoubtedly the highest yielding strain of early oat ever introduced. Our customers, needing a good early heavy-yielding oat, cannot possibly do better than give the Iowa 103 a trial. It has been tried largely in the Western and all Cornbelt States and wherever grown, has outyielded all other varieties in the same neighborhood from 10 to 30 bushels per acre. We do not hesitate to offer it as the best Oat for the West and all Cornbelt States as yet produced.

Mr. J. M. Baker, our Grower, says: "I have been raising Oats for years, but never have I raised such Oats as the Iowa 103. Bred from the old Yellow Kherson, they retain all the good qualities of the Kherson and in addition are a better color, being pure white and a much greater yielder. The grain is not so large as the Silver Mine Oat, but more plump and heavier and with very thin hull. The Iowa 103 Oat matures early before the hot, dry season sets in and before blight and rust appear. It has also proven to stand up extra well on heavy rich soil and wherever the ground is rich and oats lodge or run to straw these new Oats will prove of great value." Mr. Baker's Iowa 103 Oats averaged over 100 bushels to the acre this season.

Every farmer should secure some of these high yielding oats this year. These are the oats that will make you more money by increasing your yields. In fact, there is no easier way of making clear money than by introducing these oats in your neighborhood and selling the seed to your neighbors. We have an excellent lot of these oats, grown by Mr. Baker under our own supervision, carefully re-cleaned and tested for germination.

PRICES: 1 Bu., \$1.50; 5 Bu., \$1.35; 10 Bu., lots and up \$1.10. By freight or express purchaser's expense. By mail, postpaid, Lb., 25c.; 3 Lbs., 60c.

Pure Genuine Alberta, Canada, Grown Oats

The New Alberta—What They Are Like

The Biggest, Best and Grandest variety ever introduced into this country. A **BIG HEAVY YIELDING WHITE OAT**. The bordering on corner of this page is a correct illustration of kernels of these oats. You will notice they are a big, fat kernel, big enough to please anyone looking for something a little better than anything ever seen in the oat line, and an oat that weighs out from 44 to 50 pounds to the measured bushel and making a yield of 90 to 125 bushels to the acre. Ripen early for a large oat. Has a big strong, stiff straw, standing upon any kind of land, sprangled bead from 12 to 18 inches long, and some ven longer.

We have had a thousand farmers write us, when ordering Seed Oats, that they would order enough of the new Alberta, Canada, grown oats to sow 25, 50 or 100 acres, if it were not for the price.

The facts are: The cost of the seed has nothing to do with it. Any investment that will give you two dollars for one is a good investment, whether it be for Seed Oats, Seed Corn, or a horse, hog, cow, or any other investment. We would be just as glad to sell you our Alberta, Canada, oats at market price as you would be to purchase them at that price, if we could afford it. But when we have to employ a competent man to visit and inspect growing crops suitable for seed purposes before harvest and remain until threshed, and then loaded on cars at a heavy expense; then pay freight from western Canada, 1,800 miles, also pay a premium price to start with, including other incidental expense, it is easy to see we cannot sell these oats at prices of home grown oats. This being so manifestly plain, it is a question that solves itself. As proof of this we have sold more of these oats during the last five years than any of our other varieties. If you are going to change your seed, why not start with the very best, most improved varieties possible to obtain.

THE COST: The cost of seed is a secondary matter. It's a matter of yield, quantity, results and profits on the investment. The cheapest seed oats you can buy costs you from 75 to 90 cents per bushel; they germinate 50 to 60 cent, and possibly, some, 75 per cent., or one-half to one-fourth chaff, hulls or seed that will never germinate; making a liberal allowance seldom ever yield over 40 bushels per acre; thus at best they would produce on 10 acres 400 bushels. Product at 40 cents per bushel brings you \$160.00. Suppose you sow 10 acres of our Alberta, Canada, Oats that germinate 100 per cent. or close to it, every kernel starting off on a business mission, making a perfect stand, shading the ground with a big, robust growth and foliage that smothers the weeds and grass, and at harvest time produces 90 to 125 bushels per acre, or safely estimated, yields 800 bushels, every bushel weighing 44 to 50 pounds, per measured bushel, worth only 50 cents per bushel, total \$400.00, even on feeding purposes. But you will be able to sell every bushel you raise to your neighbors for seed at \$1.00 per bushel, which means \$800.00 against \$160.00.

Get in shape to grow your own seed another year, and supply your neighbors with their seed. **SOW AT LEAST TEN ACRES OF THESE OATS THIS YEAR.**

We can confidently recommend these oats and assure all our customers that they will come up to your full expectations. In fact, out of the thousand bushels we have sent out **WE HAVE NEVER HAD ONE COMPLAINT OR DISAPPOINTED CUSTOMER.**

PRICES: Pound, 30c; 8 lbs., postpaid, \$1.50. At purchaser's expense, by express [or freight: Peck, 75c; 1 bu., \$2.00; 2 to 4 bu., \$1.90; 5 bu. and over, \$1.75 per bu. Sacks free.

Remember, no other seed firm is able to offer you Alberta, Canada, grown seed oats of this superior variety.

Diamond Joe's Big Early White Corn

Has Captivated the Entire Corn World

The Earliest Maturing Big Eared White Corn Known or Grown

Has uniformly made heaviest yields everywhere either white or yellow. It resists drought and hot winds better than any other known variety.

Diamond Joe This excellent variety of corn was originated and first introduced by the Ratekin Seed House of Shenandoah, in 1905, and has been planted during this time in every section of this country where corn is grown, also in a number of foreign countries, and everywhere, north, south, east and west, it has proven one of the best, most wonderful in uniform large yields and early maturity that has ever been produced, in fact it has a record of over 200 bushels of shelled corn per acre, ninety-five days from time planted, and a record in hundreds of instances of 100 to 125 bushels and over per acre. We can fully recommend this splendid variety of corn to the farmers and corn growers, everywhere, as one, if not the best, safest and surest to plant on either rich or poor soil; also as the heaviest in yield, either white or yellow.

Droughtproof In the great drought stricken districts of Nebraska, Kansas, Missouri, Oklahoma, Arkansas, Texas and other localities, during the corn growing season of 1913, where we sold and shipped thousands of bushels of this seed corn, it withstood and resisted the drought, heat and hot winds better than any other variety, and in many places made yields of 30-40-50 and 60 bushels per acre where other sorts were almost or a total failure. This corn has made corresponding yields, everywhere, when seasons were good and were had, and all who have been fortunate enough to plant it have won a prize by doubling their yields. In fact it would make one gasp with astonishment to read the hundreds of letters and reports we have received from farmers who have planted and grown crops from this corn—many of them are almost unbelievable, but run so uniformly alike they are undisputable.

Description The accompanying illustration is a true picture, from a photograph of this corn, showing its general type and character. From the name we gave this corn some people may draw the impression that it is a large jumbo-overgrown variety, but it is not. It, however, is a large eared corn, running somewhat larger in size than Iowa Silver Mine. Every stalk produces one and two good ears, and this is where its large heavy yield comes in. The stalks are large, strong and robust, growing to a height of 8 to 12 feet, dependent upon land, upland or bottom land, has a very heavy extensive root system and this is where its vitality to resist drought and hot weather comes in; the roots being almost equal to sorghum and Kaffir corn. Medium ears run from 8, 10, 11 and some 12 inches long and over, but usually about 10 inches, 16 to 20 rows, deep kernels, solidly set on cob of medium size. In short, this corn was bred with an eye single to heavy yields and early maturity and not for show purposes, but for all around general crop purposes. There is no variety that will do better or equal it on old, poor or hill ground, and at same time there is no variety grown that will yield more bushels of good sound corn on strong, rich corn land. It is the embodiment of all the good qualities contained in all the best varieties, it's the sure thing. Our seed stock of this corn is exceptionally fine this year (extra choice), absolutely pure and we hope to be able to fill every order that comes to us, large or small. If you are looking for the corn that will make you the most bushels and the most money, stop right now and order enough to plant your entire crop. It's the corn that will do it. Plant Diamond Joe on good land and do your part and it will make you 100 bushels per acre.

Points of Supremacy

1. It is a pure and distinct variety.
2. It is a strong, vigorous, robust grower from the start.
3. It is free from barren stalks, every stalk bearing one or more well developed ears.
4. It is very early to mature, making itself everywhere in 100 days or less.
5. It will thrive and do well in extreme dry weather and drought, when other varieties fail.
6. Diamond Joe is a superior variety of corn from every point of view and will make you the most bushels and the most money wet or dry—any season. Order enough to plant your entire crop. We are sure this corn will not disappoint your best expectations.

PRICES: Ear, postpaid, 50c; 1 lb., postpaid, 35c; 7 lbs., \$1.60 Freight or Express: pk., \$1.75; bu., \$6.50; 5 Bu., or more at \$6.00 per Bu. If wanted in ear-crated, add \$1.00 per bushel.

Diamond Joe's Big Early White.

Novelties and Specialties for 1918

"NO NAME" TOMATO.

CABBAGE---Early Copenhagen Market

A splendid new variety of Cabbage, especially popular with market gardeners. One of the finest, large, round-headed early cabbages in existence. Its most desirable characteristic is that all heads mature at the same time, enabling the grower to harvest the entire crop at the first cutting. Heads average about ten pounds in weight, very solid with small core. The quality is very fine and flesh exceedingly sweet. It matures as early as Charleston Wakefield and yields much more heavily to the acre. Copenhagen Market is short stemmed, the heads resting nearly on the ground. Leaves are light green, rather small, saucer shaped and very tightly folded; the plants may therefore be set closely in the field. With all these good points; earliness, good quality, uniform ripening, splendid appearance of its hard, compact heads—Copenhagen Market is without question the best variety for the market gardener as well as for the home planter with limited space at his disposal.

PRICE: Packet, 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00; Postpaid.

CELERY---New Marble White

We take pleasure in offering our customers for the first time, Marble White, an exceptionally choice strain of pure white celery. This is without question one of the most valuable varieties ever introduced. Although much earlier to mature than other varieties, it produces large solid white hearts being nearly twice the size of ordinary varieties. As the name designates, the flesh has a hard, almost marble-like appearance, but is so brittle and crisp as to require extra care in handling. The plant is beautiful in appearance, of close habit and compact growth. As the plant grows to maturity, the inner stocks and leaves turn white, thus making very little earthing up necessary to bleach it. It is claimed to be more vigorous than the Golden Self Bleaching variety and its keeping qualities, flavor, and quality unsurpassed by any other celery. Our original seed of this strain was grown in France and is much preferred to home grown seed. Our supply is limited and will be sold in packets and ounces only.

PRICE: Packet, 15c; ounce, \$1.25; Postpaid.

"NO NAME" TOMATO

\$30.00 FOR A NAME

In "NO NAME" we believe we have an earlier and better tomato than even our famous Magi-Queen which we introduced in 1912. Since that time we have been instrumental in aiding our grower to produce a superior tomato, by combining the earliness, flavor and beauty of the famous Magi-Queen with the solidity, size and color of several other early varieties, until we do not hesitate in offering "NO NAME" as the earliest, best and grandest tomato ever introduced. Never were lovers of good tomatoes stirred before, as when we introduced our Famous Magi-Queen in 1912. We received letters and testimonials from one end of the country to the other praising this tomato and the first season were unable to supply half the demand for seed. To those who have tried our Magi-Queen and all others, we heartily recommend our new "NO NAME" and as an inducement to try out this variety, we are offering

\$30.00 for a Name

Of course we want a name for our new tomato and will give the following prizes for the best names and descriptions of this tomato, during the growing season:

\$15.00 for best name and description.

10.00 for second best name and description.

5.00 for third best name and description.

Try out this new tomato and write us in September.

PRICE: Packet, 15c; Oz., 75c; $\frac{1}{4}$ lb., \$2.50.

A New Pea---Extra Early Iowa Dwarf

A LARGE PODDED EARLY PEA.

Just what we have all been looking for. A dimpled Pea, earlier than the earliest with pods from $3\frac{1}{2}$ to 5 inches long. The vines are strong and stocky, attaining a height of 18 to 24 inches and produce heavy crops of large, handsome, dark-green pods. The crop is practically matured at once which will make this a valuable pea for the market gardener. Peas are deep green and of the very finest quality. We have only a limited amount of seed to offer this season, but hope to list it among our regular varieties another year. Order early.

PRICE: Packet, 10c; $\frac{1}{2}$ lb., 20c; lb., 35c; Postpaid.

PEPPER---Pimiento or Perfection

This is the mildest and sweetest pepper grown. Very prolific, with very thick, mild flesh. Is a splendid keeper and shipper and most desirable for salads, stuffing, pickling, canning whole and for flavoring. It is of medium size, rather elongated, and tapering to a sharp point. When ripe the peppers are brilliant scarlet and very attractive. They also present a very attractive appearance when filled for the table. Pimiento Peppers will be found especially fine for all culinary purposes because of the delightfully mild, sweet fresh flavor, thick, firm flesh and handsome appearance.

PRICE: Packet, 10c; $\frac{1}{2}$ oz., 30c; oz., 50c; Postpaid.

RADISH---Little Red Wonder

Earliest of all Scarlet Radishes. In Little Red Wonder, we believe we have the earliest, best, most attractive, and finest flavored turnip radish yet introduced. During the past spring, this variety made radishes in from twelve to fifteen days and in one instance—TEN DAYS. Almost unbelievable—but we have the proof. If you want to be the first in your neighborhood to have early radishes, by all means plant Little Red Wonder. Our supply is limited. Order early.

PRICE: Packet, 10c; oz., 20; Postpaid.

Highest Grade Vegetable Seeds for 1918

Asparagus

Sow an Ounce of Seed to 50 Feet of Row.

Asparagus is rapidly becoming one of the most popular garden delicacies grown. Where it is an odd individual or two grew asparagus a few years ago—will be found hundreds cultivating it today.

Sow the seeds in drills, about one inch deep, and the rows about one foot apart. Keep the soil mellow and free from weeds during the summer, and in the fall or succeeding spring the plants should be set about one foot apart and the crown four inches below the surface. The beds should be narrow so as to permit of cutting to the center. Before winter covers the beds with about four inches of manure. Salt is an excellent manure for asparagus. Sow a little on the surface in the spring and it will keep down the weeds. The young tops may be cut for the table the second summer, but not very freely until the third.

Columbian Mammoth White—A new and entirely distinct variety that produces shoots which are white and stay white as long as fit for use. It is more robust and vigorous in habit and grows up larger shoots and fully as many of them as Conover's Colossal, and requires no fertilizing in order to furnish the white shoots so much sought after. Packet, 5c; oz., 10c; ¼ lb., 25c; 1 lb., 85c.

Barr's Mammoth A bunch of 25 edible shoots weighed 13 pounds. The shoots are quite often 1 inch in diameter, of a very fine flavor and are very tender and succulent. Packet, 5c; oz., 10c; ¼ lb., 25c; 1 lb., 85c; Postpaid.

Conover's Colossal A mammoth green sort of the largest size and of good quality. Packet, 5c; oz., 10c; ¼ lb., 20c; 1 lb., 75c; Postpaid.

Palmetto Mammoth in size, even and regular in growth and appearance. Usually ready for market before other varieties. Packet, 5c; oz., 10c; ¼ lb., 20c; 1 lb., 85c; Postpaid.

Asparagus Roots By far the quickest way to obtain an asparagus bed is to set out roots; with large, strong roots such as we supply, a bearing bed may be had in one year. Asparagus Roots thrive best in soil exceptionally rich and mellow and supplied with a liberal amount of humus. A simple way to start the asparagus bed is to plow furrows 7 inches deep and 3 to 4 feet apart, according to the richness of the soil, then set the plants, which should be at least 1 year old (2-year-old are better), in the trench, allowing 12 to 18 inches between them; spread the roots out all and cover with 2 inches of soil. After cultivation, gradually fill in the trench, eventually burying the crowns of the plants to a depth of 6 inches.

Cultivate shallow and frequently the first season and as soon as the stalks are dead in the fall, remove them and cultivate the entire surface of the bed to a depth of 4 inches, then very early in the spring to a depth of 3 inches, and again the latter part of June, working into the soil at this time a liberal supply of decomposed stable manure.

We send Asparagus Roots by express or parcel post. By either method they will arrive in first class growing condition. We offer large, strong roots, which produce the most satisfactory results. Roots set up in bunches of 25 each.

Any of the above varieties at the following prices:

ONE-YEAR-OLD ROOTS, Price, Postpaid: 8 for 25c; 25 for 65c; 100 for \$1.00; 100 for \$1.75.

Price, by Express: 25 for 35c; 50 for 60c; 100 for \$1.00.

TWO-YEAR-OLD ROOTS, Price, Postpaid: 8 for 23c; 25 for 75c; 100 for \$1.25; 100 for \$2.00.

Price, by Express: 25 for 50c; 50 for 80c; 100 for \$1.50.

Artichoke

One ounce of Seed will produce about 500 plants.

A delicious vegetable. The blossom is cooked and prepared like asparagus.

Plants set in any good soil with slight covering in winter will remain bearing several years.

LARGE GLOBE. PRICE: Packet, 10c; oz., 45c; ¼ lb., \$1.25; 1 lb., \$5.00; Postpaid.

EARLIEST. The earliest Artichoke known. PRICE: Packet, 10c; oz., 45c; ¼ lb., \$1.25; 1 lb., \$5.00; Postpaid.

Broccoli

Culture same as Cauliflower.

Large White The most useful variety, easily grown. The plants are quite hardy, if set outdoors early in the crop will be ready the latter part of September; successful growing could be made for later cuttings. The heads are very large, pure white and unsurpassed in quality. PRICE: Packet, 10c; oz., 45c; ¼ lb., \$1.00; 1 lb., \$3.50.

PURPLE CAPE—A standard sort very fine. PRICE: Packet, 10c; oz., 35c; ¼ lb., \$1.00; 1 lb., \$3.50; Postpaid.

COLUMBIAN MAMMOTH WHITE.

Brussels Sprouts

Pedigreed Hamburg This melting, luscious vegetable is unquestionably one of the choicest and most appetizing morsels ever set on a table. While in appearance they resemble miniature cabbage, they vastly excel the most tender and choicest cabbage ever grown. This exceptionally hardy type is easy to cultivate. Can be left in the ground long after frost, as hard frost enhances its eating qualities to a considerable degree. We have created an unprecedented demand for our Pedigreed Hamburg all over the United States owing to its remarkable juicy tenderness and strong, robust, healthy growth. We consider it incomparable.

Culture is the same as cabbage except that plants should be set 15 inches apart in rows 2 feet apart. PRICE: Packet, 10c; oz., 30c; ¼ lb., 90c; 1 lb., \$3.00; Postpaid.

Improved Dwarf Is planted all over the United States. It is a vegetable of great delicacy. PRICE: Packet, 5c; oz., 25c; ¼ lb., 75c; 1 lb., \$2.75.

Dalkeith A great improvement over the old-fashioned Dwarf. PRICE: Packet, 10c; oz., 30c; ¼ lb., 90c; 1 lb., \$3.00.

Borecole or Kale

One ounce of Seed will produce 3,000 plants.

Borecole or German Greens. Culture—For late Fall or early Winter use, sow in June and transplant about the middle of July in rows 18 to 24 inches, setting the plants 12 to 18 inches apart in the rows. For Spring use, sow in August and transplant a month later. One ounce will produce 3,000 plants; ¼ pound enough for an acre. Protect during winter with a covering of hay or coarse litter. All kales are best when touched by frost.

Moss Curled The best and hardiest variety in cultivation. Robust, very compact in growth, with dense moss curled leaves of deep green color. The stems produce a wealth of curly sprouts which are perfectly tender and of a delicious flavor. 30 inches high; stands cold weather and improves in deliciousness. PRICE: Packet, 10c; oz., 25c; ¼ lb., 50c; 1 lb., \$1.75; Postpaid.

Dwarf Erfurt This magnificent novelty we introduced from Erfurt, Germany, where it grows to perfection. It is extremely prolific, of light green color and most delicious flavor. Leaves large and curled like parsley. PRICE: Packet, 10c; oz., 20c; ¼ lb., 45c; 1 lb., \$1.50; Postpaid.

Tall Scotch Green A hardy, ornamental plant, 3 to 4 feet high, with long, deeply cut and curled, light green leaves of fine quality. PRICE: Packet, 5c; oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

Gentlemen: I take great pleasure in saying the Columbian Mammoth White Asparagus I procured from you is doing exceptionally well. It is the best flavored asparagus I have ever tasted, and remains tender much longer than ordinary varieties.

Watertown, Mass.

Yours truly,
CHAS. WATSON.

Beans---Bush or Snap

Green Podded Varieties

Bush Beans are the type generally grown for early string or snap beans, both for home use and for market. They come in two general classes, the Green-Podded and the Yellow, or Wax-Podded varieties. It is a question which type is the better. Some people like one and some the other. Some markets prefer the wax pods, while others prefer the green pods.

It is our personal opinion that there is really very little difference in flavor, yield, earliness, hardness or quality between the yellow pod and green pod beans, but still different gardeners and different markets have their preferences, so we must grow both kinds.

NOTE—Each packet of beans will contain two ounces, sufficient to plant about twenty hills. All beans priced by the packet, half pound and pound are delivered postpaid. Write for prices on large quantities.

CULTURE: Beans are somewhat tender, but it often pays to take some risk. Plant in warm, loamy soil at the beginning of settled, warm weather in spring, and at intervals for successions until August. Rows may be made two feet apart, and the beans planted a few inches apart in drills, of three or four beans in hills six or eight inches apart. Cultivate and hoe frequently, always, however, when the vines are perfectly dry. In hoeing draw the soil up toward the rows or plants. One quart will plant 100 feet of drill.

Beautiful Beans

Bountiful—First in Spring—The Last in Fall. Absolutely Stringless—Continuous Bearer.

☞ This superior variety was first introduced by us in 1910, and our customers have grown it everywhere, and it has become exceedingly popular wherever grown. It is a distinct variety and improvement in the green Bush Beans. We cannot praise it half high enough. The plant is remarkably handsome, being practically rust and mildew proof. It is very hardy, extremely early, very prolific, and bears continuously longer than any other variety—is the first to produce pods fit to pick in the spring, and the last to yield edible pods in the fall; in fact frost usually finds midsummer-sown plants still in pod and blossom.

But the crowning merit of this grand Bush Bean is in the rich green pods which are of immense size, thick, broad, extra long, very uniform in shape, solid, meaty and high quality, tender and delicious flavor exclusively their own; moreover the pods are absolutely stringless and entirely free from tough membranous lining, not only when young, but tender "snap brittle" quality is retained even into maturity.

In addition to other merits of Bountiful as a snap Bean it is most excellent shelled after it is ripe for winter use.

This variety, while unrivalled in its class for the home garden, is also in great demand among the truck growers. Its handsome appearance and superior quality holds our customers everywhere.

PRICE: Packet, 10c; ½ lb., 30c; lb., 50c; Postpaid.

Stringless Green Pod Now one of the most popular bush beans in America. In point of earliness it ranks among the first, in quality it is excelled by none, and in bearing ability it stands without rival.

The pods are round, fleshy and nearly straight; are borne in abundance through a long season, beginning early. They are five inches in length, rich green in color, very tender, and of highest flavor. They remain long in edible condition. This bean is unexcelled for home use, and will be found very profitable on account of its heavy cropping ability.

PRICE: Packet, 10c; ½ lb., 30c; lb., 50c.

Keeney's New Green Pod Refugee or 1,000

to 1 Very popular; enormous yielder.

For more than 20 years the originator of this variety has been working to eliminate the string of the old Green Pod Refugee. In this new bean he has succeeded, and we are glad to be able to offer our customers this Stringless Refugee. Its habit of growth is practically the same as the old Thousand to One Refugee, but maturing its beans earlier. Very productive; of true bush form; attains a height of eighteen inches. The handsome, round, green pods average about 5 inches long and are brittle, tender, fleshy and perfectly stringless. Its quality is superfine; beautiful green color, entirely stringless, makes it superior to any other variety. Very popular with canners.

PRICES: Packet, 10c; ½ lb., 30c; lb., 50c; postpaid.

Stringless Green Pod Bush.

Burpee's Stringless Green Pod

This famous Bean is unequaled! It combines hardness, earliness, and wonderful productiveness, with pods of finest quality. Early plantings may be made to produce the earliest crop.

By repeated plantings pods may be had in constant succession from spring until frosts in the fall. The pods are the finest in quality, of a rich green, round and straight, five inches long, solidly meaty and broad—deeply saddle-backed, tender, brittle, and of finest flavor, always stringless. In a word, all agree that Burpee's Stringless is absolutely unequaled!

PRICE: Packet, 10c; ½ lb., 30c; lb., 50c; Postpaid.

Write us for peck and bushel prices on beans.

ountiful.

Longfellow Beans

Remarkably Early, Exceedingly Prolific

An extra early bush bean of fine quality producing a fine crop of long, round green pods averaging $6\frac{1}{2}$ inches long, always solid, tender and of delicious flavor. The plants are unexcelled in bearing qualities, extra early; ready to pick in advance of any other variety. (See cut).

PRICE: Packet, 10c; $\frac{1}{2}$ lb., 30c; lb., 50c; Postpaid.

Improved Earliest Valentine Our improved strain of this famous, reliable, green podded bush bean is ready for the basket in 35 days. It has full, meaty, round pods, which possess tenderness and superior flavor. Plants grow 15 inches in height and is the most prolific bean of its kind.

PRICE: Packet, 10c; $\frac{1}{2}$ lb., 30c; lb., 50c; Postpaid.

Earliest Improved Valentine.

Wax Podded Varieties

Wardwell's New Kidney Wax

Most Profitable Market Gardener's Shipping Bean.

This bean is entirely distinct from that of other Wax varieties; perfect kidney-shape. Most prolific variety; one of the earliest and most hardy. Pods long, flat, waxy yellow, brittle and stringless. Desirable for every climate. Can be grown with great profit in the South for early shipment North.

PRICE: Packet, 10c; $\frac{1}{2}$ lb., 30c; lb., 50c; Postpaid.

Wardwell's Early Kidney Wax.

Longfellow. Six Weeks.

Dwarf Black Wax

This is fully one week earlier than any other Wax Bean. There are none better for first early crop. PRICE: Packet, 10c; $\frac{1}{2}$ lb., 30c; lb., 50c; Postpaid.

Improved Black Wax

(Dwarf German Prolific.) This bean originated from the old Black Wax and is a great improvement over its parent. One of the earliest of all the wax beans and very productive. The pods are from 4 to 5 inches in length, usually slightly curved, quite round, brittle and stringless.

PRICE: Packet, 10c; $\frac{1}{2}$ lb., 30c; lb., 50c; Postpaid.

Davis White Wax

A very showy variety, and is largely grown for canning factories. The pods are a clear white color, plump, full and rust-proof, or as nearly so as any bean may be. This is an excellent variety, but does not retain its tenderness as long as our Kidney Wax.

PRICE: Packet, 10c; $\frac{1}{2}$ lb., 30c; lb., 50c; Postpaid.

Gentlemen: I am letting you know that I got my May seeds all O. K. yesterday, the 4th of May. Many thanks. I am well satisfied and furthermore, if I need anything again, you shall have my trade.

FRANK KRUGER.

Stanton, Neb., May 5, 1917.

Golden Wax.

Beans--Bush Varieties--Cont.

Improved Rust Proof Golden Wax The Standard Wax Variety for

General Use. It would seem that the ideal in Wax Beans had materialized with this improved type. It is the highest strain of Golden Wax yet produced and we voice the expressions of thousands of delighted customers, when we state this seed of Selected Golden Wax is distinctly in a class of its own.

Gardeners find this selected seed highly meritorious on account of its earliness, splendid shipping qualities and strikingly handsome appearance. The pods are oval, a trifle straighter than the old types of Golden Wax, very brittle, stringless, superb, of luscious flavor. About 5 inches long, deep rich yellow color. The plants are dwarf, thick stem, growth very rapid maturing.

PRICE: Packet, 15c; $\frac{1}{2}$ lb., 35c; lb., 60c; Postpaid.

New Kidney Wax We have realized the importance of a pure

white, tender bean for canners' purposes, and in this new Kidney Wax we believe we have just what the people have been looking for. The beans being pure white, present the most attractive appearance when cooked. The fresh pods remain tender longer than those of any other variety. It is as heavy a yielder as the Davis White Wax and of a superior quality. The pods are straight, of a bright lemon yellow, brittle, meaty and entirely stringless at all stages of growth. It is the very bean the canners and truckers have been seeking for years, as it combines quality and quantity, which can be used as a string bean until large enough to shell, while the seed, being large and pure white, is most desirable for shell beans, both for summer and winter use. **PRICE:** Packet, 10c; $\frac{1}{2}$ lb., 30c; lb., 50c

Red Valentine The pods are very fleshy, round and saddle-backed with only slight strings. Bushes grow uniform, about 15 inches in height, and produce a large crop. It is an old standard and one of the most profitable sorts for private use or market.

PRICE: Packet, 10c; $\frac{1}{2}$ lb., 30c; lb., 50c; Postpaid.

The Tapary Beans, the Great Dry Weather Bean

This is the bean that was discovered at the foot of the mountains in the arid regions of Arizona, where the rainfall is but 9 inches during the whole year. It was discovered by Robert W. Clothier, of the University of Arizona, who traveled 1,300 miles in a wagon, through Arizona, studying the possibilities of Dry Farming and seeking to learn what crops were best suited to the dry climate of the Southwest. These beans were taken to Tucson to the agricultural experiment station, in 1908, where they have been grown with great success since that time, but it is only now that we have been able to obtain sufficient seed to justify us in cataloging them; however, have grown them here the past two years in a limited way, in order to test them out, and they have, here as elsewhere, proven one of the best, most nutritious beans of all previous introductions. They are a white bean, very much resembling the Navy Bean, although not as large in size, but of all the producers they take the cake over all. They are not only one of the finest Navies for use, but also quite equal to Field Beans and Peas for stock—for

hay and forage. They also resist dry weather beyond any comparison with others, and are the quickest to mature; time of maturity being full 30 days ahead of the White Navy Bean. Thus they can be successfully grown if planted in Iowa or Nebraska as late as July 10.

PRICE: Packet, 10c; lb., 40c.; 3 lb., \$1.00; Postpaid.

Choice Navy Beans Our stock of this well known variety

has been carefully selected and cleaned and will be found far superior to beans commonly offered as "Navy Stock." **PRICE:** Large packet, 10c; $\frac{1}{2}$ lb., 25c; lb., 40c; 3 lbs., \$1.00; Postpaid.

Burlingame Medium Field Bean Earliest, hardiest,

most productive and most profitable field bean in America. It averages 40 bushels per acre. It ripens early, and in a wet season remains sound and healthy where other varieties rust and spot. The ripened seed is pearly white, and is much handsomer than other sorts, consequently command top prices. **PRICE:** Packet, 10c; $\frac{1}{2}$ lb., 30c; lb., 50c; Postpaid. Write for quantity prices.

Burpee's Improved Bush Lima Beans

Bush Limas Are especially desirable for the home garden, as a good supply of Lima Beans may be produced without the expense of furnishing poles, and the Bush Limas come into bearing two or four weeks earlier than the pole varieties of similar type. The planter should bear in mind that the bean plant is a strong grower, and the soil should be made very rich to enable the plants to produce a good crop of beans. See next page for price.

Dwarf or Lima Beans--Continued

Burpee Improved Lima Pods are truly enormous in size—borne abundantly and well filled with handsome beans which are both larger and thicker than those of the popular Burpee's Bush Lima—and fully eight days earlier! It differs from the best strains of Burpee's Bush Lima in having uniformly much larger pods, producing more beans, while both pods and beans are not only larger in size but also considerable thicker. The growth is even more vigorous, with heavier foliage. The plants are

uniformly upright. Full-grown bushes measure thirty inches in height and twenty-four inches across the top. The blossom-bearing stalks are thrown well out from the foliage and the pods are borne frequently in what might be called "clusters" of from five to eight. The pods measure five to six inches long by one and one-quarter inches wide. Even when of full size the enormous beans are of the most luscious flavor; they are thin skinned and truly delicious; they are ready to market eight to ten days earlier. **PRICE:** Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c; Postpaid.

Henderson's New Wonder Bush Lima.

Henderson's Bush Lima Bean

Magnificent dwarf growing Lima; very early, of a delicious flavor, extremely productive and should be planted in every garden in America. It's early. It's fine. It's just the thing for a family garden. It is wondrously prolific. A package or a pound will furnish sufficient for a good sized family. It is one of those beans that can't be improved upon.

PRICE: Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

New Fordhook Bush Lima

Fordhook Bush Lima is altogether different from the Burpee Improved, as it belongs to the potato or "fat" class of Limas. The shelled beans are much thicker and more blocky in shape, and are crowded so closely in the pods they are flattened on the ends. Pods are large, 4 to 5 inches long, containing 4 to 5 beans. Even when of full size are tender, juicy and sweet flavored, like large, flat Limas, being much better in quality than any other Potato Lima. **PRICE:** Packet. 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

King of the Garden

A strong grower and uniformly large podded. The pods frequently contain five to six large beans. These beans are of excellent quality, easily shelled; of large size and handsome appearance. **PRICE:** Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

Dreer's Bush Lima Bean A Standard Late Variety Everywhere. One of the Most Popular Limas Grown. Despite the eulogies and many claims set forth for other meritorious Limas of the newest introduction as well as the older sorts, thousands upon thousands of individuals refuse to part with this magnificent type.

Dreer's has for many years held undisputed supremacy among

Limas. Admittedly true that it has divided honors of late with new innovations it is still extensively grown owing to its being a fine "follow up" or late variety and unusually heavy in productiveness. Dreer's is exceptionally sweet and succulent with a taste decidedly its own. In fact this Lima has the reputation of being sought for its flavor more than any other. Does well anywhere and much better than most sorts in dry weather. **PRICE:** Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

DREER'S BUSH LIMA.

Manker, Ohio, April 8, 1917.

Gentlemen: My seed came to hand all O. K. Am well pleased with same and will give them a good trial and if they prove to be as fine as they appear, I will recommend them and show results to my neighbors and you will surely receive orders from here. At the present time, I can recommend you as a company who deal perfectly honest and fair.

Yours respectfully,
U. L. PAYNE.

Celina, Ohio, April 19, 1917.

Dear Sir: I received your seeds in good condition. I am very proud of them. I am very much pleased with your seeds and think they grow fine, the best we can buy. I believe your seeds are always good. We got some from your firm before and I think there is no other seed as good.

Yours truly,
FRANK DEPWEG.

Pole Beans

The Pole or Climbing beans are more tender, and require more care in culture than the bush varieties. They should be planted about two weeks later and will succeed best in sandy loam.

Each packet of Pole Beans will contain 2 ounces and will plant 15 to 20 hills. A pound will plant about 100 hills.

Kentucky Wonder or Old Homestead We can recommend this as one of the earliest and most satisfactory of all Green Podded Pole Beans, and unsurpassed for using in the green state. It is enormously productive; the long, silvery, green pods hanging in great clusters from top to bottom of the pole. While young the pods somewhat resemble the popular old Refugee. This is the best and most profitable bean for the market gardener, the pods being so showy and produced so abundantly.

PRICE: Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

Lazy Wife Pole Bean The pods are produced in great abundance and measure from 6 to 8 inches in length; they are broad, thick, very fleshy and entirely stringless. The pods retain their rich, tender and stringless qualities until nearly ripe, and are unsurpassed in all stages. Each pod contains 6 to 8 round, white beans which make excellent winter shell beans. They are late to mature, but are valuable to extend the season. This is an excellent bean, and is sure to give satisfaction.

PRICE: Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

White Dutch Case Knife Yields an immense crop of handsome, flat white beans of excellent flavor. Cooks easily. PRICE: Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

Red, Speckled, Cut Short or Corn Hill An old variety, very popular for planting among corn. It will give a good crop without the use of poles; vines medium, twining loosely, with dark colored, smooth leaves and white blossoms in small clusters; pods short, cylindrical and tender; beans nearly oblong, cut off diagonally at the ends; white, covered at one end and slightly over the whole surface with reddish-brown dots. PRICE: Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

Horticultural Pole Bean The finest haking bean with pods six inches long; good either as a snap or for shelling. The mammoth pods are beautifully striped and splashed with brilliant carmine. Very showy and attractive and the immense beans are of the finest quality. PRICE: Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

Giant Podded Lima This, the largest podded and heaviest cropper of all the Limas. It is earlier than King of the Garden and a heavier yielder. A very vigorous grower, the vines attaining a height of 10 to 12 feet, excelling in this respect all other Limas. We have been breeding this type for four years at the trial grounds and offered it in the catalogue for the first time last year. It is the largest podded, the largest seeded and most productive of all Lima Beans. PRICE: Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

Lima, King of the Garden This old standard sort is one of the best for main crop. It is vigorous in growth and immensely productive. The vines begin to produce pods near the foot of the pole, and the bearing season continues without interruption until frost. The pods are large, numerous and well filled. The beans are of mammoth size and uniform. PRICE: Packet 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.

Select Table Beets

One ounce will sow 50 feet of row. Five to six pounds for an acre.

CULTURE: The best results are obtained on a deep, sandy loam. For general crop sow as soon as the ground will permit in drills 18 inches apart and thin out 4 inches in the row. For winter use the turnip varieties may be sown in June, and the beets may be kept by

storing in a cellar and keeping covered with sand or sandy soil to prevent wilting, or they may be kept outdoors in pits such as are used for apples and potatoes. One or two ounces, or single packets of two or three sorts, will give a good supply for a large family. It is best to sow in freshly prepared soil, which should be pressed firmly over the seed.

Crosby's Egyptian

A distinct improvement on the older forms of Egyptian beet, with a larger and more globular root. It is extremely early, and is smoother and of better color and quality than the original sort. Produces a most desirable beet of presentable size and shape, very early, making it a favorite with the market gardeners. PRICE: Packet 5c; oz. 20c; $\frac{1}{4}$ lb. 50c; lb. \$1.75.

Dark Red

Egyptian.

Dark Red Egyptian The Egyptian beet is one of the most popular varieties among market gardeners for forcing purposes. Justly or unjustly it is considered to be the earliest of all. It certainly will bear close planting in the valuable space under glass or in a warm garden in early spring. It is turnip shaped, and when young is crisp and tender. In color it is dark red. To gardeners having a preference for Egyptian, we offer the best strain. PRICE: Packet 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Crosby's Early
Egyptian

Select Table Beets--Continued

Early Eclipse Beet Is one of the best known of the table beets, and we have a strain of extra purity and merit, particularly noted for earliness. It is indeed high praise to say that our Eclipse Beet is almost or quite as early as Egyptian, for the latter has been long accepted as the earliest of all; and Eclipse has ever been recognized as superior to Egyptian in table value. Our strain has small top and is smooth, fine grained and tender, with bright red color. Many market gardeners have discarded Egyptian entirely in favor of this strain of Eclipse. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Extra Early Dark Beauty One of the earliest ever grown. Beautiful oval shape, and the color is a rich dark red, Flesh is fine grain and cooks tender; rich and sweet. Its flavor is superb, free from side roots and smooth, and is very beautiful in market. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Detroit Dark Red This splendid second early variety is highly recommended for market and private gardens. Roots are globular, very smooth with short tops; skin blood red, flesh dark blood red, sweet, tender and delicious. The tops are small and upright in growth. Especially fine for market bunching. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Early Eclipse Beet

Early Blood Turnip Beet

The Early Blood Turnip Beet is one of the old standbys and still retains its position at the head of all the best table beets there is grown. It is very early, nearly as early as Egyptian and greatly surpasses that variety in flavor. The roots of the Blood Turnip Beet are nice large size and grow uniformly perfect, nearly globe-shaped with a slim tap-root. The leaves are small, colored dark crimson. The color is blood red and quality excellent, flesh being tender, rich deep crimson and fine flavor. Makes a splendid appearance and an excellent seller on the market. **PRICE:** Packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

Gentlemen: The seeds I ordered from you came in excellent condition, and wish to thank you for prompt attention. Enclosed find another order. Please send at once by parcel post.

O. GRUMAN.

Early Blood Turnip Beet.

Market Gardener's Beet This is the ideal beet for market gardeners and the home garden. It is very symmetrical with small tap root and but few fibrous roots; color outside is deep blood red; inside, layers of blood red and light red alternately. When cooked they are a beautiful dark red throughout, fine grained and unsurpassed in quality. It continues to grow until late in the fall, attaining a large size and making a good selling and eating beet for winter. One sowing only is necessary to produce early beets for market and main crop for winter use. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Crimson Globe A grand second early and main crop variety. This variety has become remarkably popular among gardeners in all sections of the country and needs no recommendation to those who have grown it. It is of medium size, generally about 3 inches in diameter, very handsome in shape, a little deeper than round, with a smooth, even surface. The leaves are rich crimson in color, borne on slender stems, which grow quite compactly, and are thus easily removed. The flesh is deep crimson, ringed and zoned in varying shades. It is exquisitely tender, and delicious in flavor. Though it grows quickly enough for very early use, it will remain tender for a long period. **PRICE:** Packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

Half Long Blood A very highly appreciated variety wherever grown; half long shape and very dark blood-red color. An excellent variety for winter use. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Mangel Wurzels Beets

FOR STOCK FEEDING

A Money Making and Money Saving Crop

Mangels are the most important of all root crops for stock feeding purposes as has been proven by many State experimental stations, and by thousands of prosperous dairymen and stock growers, who feed them largely. No crop pays better for the stockman to grow than Mangel Wurzel Beets. The value of these for stock feeding cannot be overestimated. The results from their use are wonderful, as is clearly shown in the improved health and conditions of the animals to which they are fed, the increased yield of milk in the cows, and the great saving of hay. When the fact is considered that 50 tons of Mangels can be grown on a single acre at a small expense, the wonder is that every farmer does not grow them. The owner of even one or two cows should grow a sufficient quantity to provide fresh food in winter, when green food is not obtainable. They are as important to the dairy and stock man of this country as corn is to the hog grower. If you have never grown them, give them a trial this season; you will find them a profitable crop.

CULTURE: Mangels require a deep soil in order to do well. Sow from April until June in rows 18 inches to 2 feet apart, and thin to 8 to 12 inches apart. If you prefer large Mangels, thin to 12 inches apart; if medium size wanted, 8 inches apart. Cultivate same as Sugar Beets. Sow 5 to 12 pounds to the acre according to width of rows.

Improved Mammoth Long Red This is the best long red mangel. It is enormously productive, yielding from 50 to 60 tons per acre and a single root often weighing from 25 to 35 pounds or more. They are of good and massive shape, of very fine texture and good quality, and though growing to immense size, are not coarse. Dark foliage, with skin bright red, flesh white, veined with rose pink. Roots though solid are easily harvested, as they grow well above the ground. Our strain of this variety is the best on the market. **PRICE:** Packet 5c; oz. 15c; ½ lb. 50c; lb. 90c; 5 lbs. \$4.00.

Golden Tankard Mangel A special feature is the rich, deep yellow color of the flesh, differing in this respect from other Mangels, surpassing them in milk producing qualities. All kinds of stock thrive on this variety. The roots are of large diameter, tapering quickly at the bottom, which is quite broad, with only a small tap-root. It grows largely above the soil and is easily harvested. It yields an enormous bulk on good land, and can be grown closely in rows. **PRICE:** Packet, 5c; oz., 15c; ½ lb., 50c; lb., 90c; 5 lbs., \$4.00.

Crimson Tankard

In appearance it closely resembles the favorite Golden Tankard. It is adapted to all soils, is easily lifted from the ground and is a very productive sort. **PRICE:** Same as Golden Tankard.

Golden Tankard Mangel.

The above is a typical illustration of the Mammoth Long Red Mangel stock of Beet.

Sugar Beets

FOR STOCK FEEDING

Giant Half Sugar Mangel This is a hybrid or cross between the Mammoth Long Red Mangel and Sugar Beet, and for our own feeding we have found it superior to either. Being sweeter, both hogs and cattle relish them. **PRICE:** Same as above.

Giant Sugar or Half Sugar Rose Very similar to Giant Half Sparl except in color. The skin is bright rose above ground and white below. Flesh white, sometimes tinged with rose. Roots grow half out of ground and easily harvested. **PRICE:** Same as above.

Sugar Beets—For Sugar Making

Klein-Wanzleben Also called Diamond Sugar Beet. This variety is cultivated on a larger scale for the best sugar factories than any other, as it usually yields 15 to 20 per cent. of sugar. Root is of straight shape, tapering evenly, and somewhat screw shape. Our seed is grown in Germany from beets which were tested as to per cent. of sugar before setting out. The heavy per cent. of sugar makes it also of great value for feeding.

Jaensch's Vitrix Undoubtedly the most highly developed variety for sugar making. Roots of medium size, white skin with tinge of gray half long and very uniform in size and shape. Flesh white and very rich in sugar.

Vilmorin-Elite This beet is the result of thirty-five years of methodical and persevering selection. In black soils rich in organic matter, it gives results equal to any other variety. Its average yield may be stated as from 12 to 16 tons an acre.

PRICES ON ALL ABOVE MANGELS AND SUGAR BEETS: Packets, 5c; oz., 15c; ½ lb., 50c; lb., 90c; 5 lb., \$4.00. Write for quantity prices.

Garden Carrots

One ounce to every 100 feet of drill.

CULTURE—For the best results the soil should be well worked to a good depth. For early use sow seed in rows 15 inches apart as early in the spring as the soil can be worked, sowing about 4 pounds of seed per acre and cover the same with one-half inch of soil; but for main crop sow about corn planting time, using 3 lbs. of seed per acre, and the seed should be covered with nearly an inch of soil. One ounce of seed will sow 100 feet of drill. Make the rows two feet apart to allow for horse cultivation. Keep free from weeds and cultivate occasionally until the roots are large enough for table use, and if grown for commercial purposes they may be cultivated with profit throughout the season.

When the plants are 3 inches high thin to 3 inches apart in the row.

Golden Beauty This is a half long stump rooted carrot, of a deeper color than Danvers; is a heavy copper and suitable for both table and stock. This carrot grows a smooth handsome uniform root; free from core, sweet and tender, never becomes stringy. On account of the immense yielding qualities, this carrot is desirable for market gardeners or any private garden and with ordinary care it will yield from 30 to 40 tons per acre. We advise our customers to plant liberally of it. **PRICE:** Packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

The Chantenay This variety is a very productive one It has an extra large shoulder, is easily dug, and is desirable in all respects. It is a stump rooted sort, very smooth, fine in texture and of a beautiful rich, orange color. For table use it is considered by many to be the best of all, both on account of shape and quality. The flesh, when cooked, is very tender. **PRICE:** Packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

Golden Beauty

Illustration

Danver's Half Long A popular standard variety of rich, dark orange color. Oxheart and Long Orange, and wonderfully productive. Under special cultivation it has yielded from 20 to 25 tons per acre. One of the finest varieties in cultivation. **PRICE:** Packets, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Early Market Stump rooted, grows about the size of our Cincinnati Market Radish, excellent forcer; fine flavor; flesh a deep orange, fine grained. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Ox Heart or Guerande

We do not hesitate to call this the most valuable variety in existence. Tops small for the size of the roots, which are comparatively short, but often reach a diameter of five inches, terminating abruptly in a small tap root. Flesh bright orange, fine grained and sweet. This variety is especially desirable for soil so hard and stiff that longer rooted sorts would not thrive in it. When young the roots are excellent for table use and when mature are equally good for feeding stock.

PRICE: Packet, 5c; oz. 23c; $\frac{1}{4}$ lb., 60c; lb., \$1.75.

Improved Long Orange (Pointed Rooted). The standard late variety; very handsome and uniform in shape; deep orange color; good flavor; yields very heavily. Requires a deep silo; plants should stand 8 inches apart in 18 inch drills for roots to attain their full size.

PRICE: Packets, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Early Scarlet Horn The favorite extra early variety. Very early; color orange-scarlet; fine grained and agreeable flavor. Tops small; has a short, stump-shaped root; grows well in shallow soil. The best early variety for table use.

PRICE: Packet 5c; oz. 15c; $\frac{1}{4}$ lb. 50c; lb. \$1.50.

Improved Long Orange

Dear Sirs: I received my catalogue and seed order and I am pleased with the same. I planted your seed last year and had a fine garden. Please send me a packet of your famous Magi Queen Tomato

McKinney, Texas, Feb. 16.

MRS. ETHEL CURRY.

The World's Celebrated Mastodon Stock Carrot

Every Farmer Should plant a few acres of carrots for stock food; they are very productive, less liable to disease than many other root crops, and being sown earlier, do not interfere so much with the labor in the busy time.

The Mastodon Carrot is the heaviest cropping carrot grown, yielding more tons to the acre than any other sort. The flesh is white, crisp and solid and very sweet in flavor. It is a vast improvement on the white and green Belgian sorts which have been favorites in the past, as it is not only much more productive, but vastly easier to handle. The roots are very heavy at the shoulder, rendering them easily harvested. An important feature, also, is that they do not break in pulling or sorting. Too much can scarcely be said of their size and great productiveness. The roots frequently measure 15 to 20 inches in circumference, and 20 to 40 tons to the acre is not an extravagant statement as to yield. It is not a carrot for the market gardener, but it is emphatically the carrot for the farmer, and once used, nothing else will take its place. Plant same as Mangel Wurzel beets but may be planted two to four weeks earlier, or even as late. Requires but 2 pounds seed per acre.

PRICE: Packet 5c; oz. 15c; ¼ lb. 50c; lb. \$1.50; 5 lbs or more at \$1.35 per pound.

Long Lemon Carrot A very large and a very rich stock carrot. We can say that there is no yellow carrot which can approach the Long Lemon in size, in yield and in feeding qualities. It is the largest and best Orange or Yellow Carrot known. The roots are remarkably fine, very symmetrical and of excellent quality, possessing high feeding properties. It is a heavy cropper on all soils, but is especially adapted for rich strong land. It grows nearly half as much weight again an acre as the ordinary varieties, and as the roots grow more above the ground it is much easier to gather the crop. This grand variety is sure to suit every one who grows it. **PRICE:** Packet 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

Improved White Belgian Carrot

**Exclusively a Stock Feeding
Carrot.**

Everywhere comes the cry, "Greater production at less cost," to the agriculturist who is sincerely striving to his utmost to eliminate waste and extravagance, to introduce efficiency and economy we commend Improved White Belgian. This is the universal Stock Carrot of Belgium noted for its industrious, frugal, thrifty farmers. In that country in peaceful times it would be difficult to find a farm without a crop of White Belgian Carrots. The popularity of this great carrot is due to its many qualities of merit. Dairymen particularly prize it for its great amount of saccharine; the flavor imparted to the milk; the avidity with which cows devour it; its immense yields; its ease of cultivation; its easy harvesting and remarkable keeping quality. This carrot is generally conceded the superb length for universal cultivation. It has a thick crown, very little core, finely grained, creamy white flesh, attractive appearance, comparatively free from side root and very sweet and tender.

PRICE: Packet 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

Mastodon
Carrot.

20 to 40 tons per acre which equals 700 to 1,400 bushels per acre and when fed with corn is equal to it bushel for bushel.

Reduced in Size. Important—Owing to the large size which these carrots attain, less seed is required to the acre than of any other sort—2 pounds an acre being sufficient.

Improved Norman Belgian Carrot This variety is planted very extensively. It is very hardy and very productive. The roots are at least 6 times as long as broad, pale orange underground, and green above. About one-fourth to one-third grows above the ground. Keeps well and is very nutritious.

PRICE Packets 5c; oz. 15c; ¼ lb. 40c; lb. \$1.25.

LONG LEMON
STUMP-ROOTED CARROT.

American Grown Cabbage Seed EXTRA EARLY SORTS

Highest Quality We pride ourselves on having the best, purest and highest grade Cabbage Seed that is sowed or at least surpassed by none. Compared with the cost of seed there is more money in growing cabbage than any other crop, and there is nothing that growers should be more particular about than the seed selection. We have had our cabbage seed grown by the same grower for years and they have proven of uniform excellent quality, so that we pride ourselves on having the purest and highest grade of cabbage seed that is offered, or at least it is surpassed by none. **SOW ONE OUNCE FOR 3,000 PLANTS; FOUR OUNCES FOR ONE ACRE.**

CULTURE—To grow cabbage successfully, first secure good seed, the quality of the seed used is of the greatest importance. No

satisfactory results can be obtained where poor seed is planted. A heavy, moist, rich loam is most suitable. The ground should be well fertilized, deeply plowed (Fall plowed, if possible), with frequent and thorough cultivation.

For early use, sow seeds of the early varieties in hotbeds, the latter part of January, or first of February. For second early, sow in hotbeds in March and April. For late cabbage, sow out of doors the latter part of April or first of May. 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. As they advance in growth, draw a little earth to the plants until they begin to head.

Henderson's Extra Early Jersey Wakefield

Undoubtedly the very finest strain of this well known popular variety in cultivation. The heads are extremely solid, pyramidal in shape, and with very little outside foliage. We grow this strain especially for the most **CRITICAL TRUCK GROWERS AND PLANTERS.** It is a little higher in price than the regular

strain, but is well worth every cent of the difference. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Large Jersey Wakefield Heads are very hard, compact, solid and conical in shape. Few outside leaves. We do not admit that our stock has any superior. **PRICE:** Packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 70c; lb., \$2.25. See illustration.

Early Winnigstadt.

Washington Wakefield Cabbage (Early.) We introduced this cabbage in 1901, at which time our stock was limited. We received so many letters of praise and congratulations regarding it, that it seemed everyone who tried it must have written to make known their satisfaction. All gardeners are so familiar with the Wakefield Cabbages that description is unnecessary. It is fully as early as any other strain of Wakefield Cabbage and double the size. No other stock equals it in earliness, size of head and purity. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50. No other cabbage of which we have knowledge has aroused such enthusiasm among cabbage experts as has our Washington 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 Winnigstadt. There are immense quantities grown in the South for Northern markets. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

All Seasons This is generally grown on Long Island for the market. Heads very large, round, often nearly spherical, as well as the winter sorts. Plants vigorous and sure heading; leaves large, smooth, with dense bloom. Remarkable for its ability to stand hot sun and dry weather. Our trial has shown that heads which were fit for market by July 10 were sound and salable September 10, the only change being increased size and density. One of the very best sorts for general cultivation. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

[Early All Head.

Early All Head The Earliest of All Early Large Cabbage, and considerably larger than any other early summer variety that is equally as early. The deep, flat heads are remarkably solid and uniform in color, from and size. The hard heads grow so free from spreading leaves that fully 1,000 more heads than usual with large cabbage can be obtained to the acre. It is really an all year round cabbage, being equally good for winter. **PRICE:** Packet, 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

Early Winnigstadt Very early. The leaves are dark green and very tightly folded, making it the hardest of any early cabbage. This variety seems to suffer less from the cabbage worm than most other sorts. Heads are regular, conical and keep well both summer and winter. Our seed has been especially selected. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Early Copenhagen Market A new early variety, very popular with market gardeners. It is the finest large, round-headed, early cabbage in cultivation. It is further desirable on account of the remarkable characteristic of maturing the heads all at the same time, enabling the grower to gather his crop with less expense and permitting the cleaning of the land at the first cutting. The heads average about ten pounds each in weight, are hard and solid with small core. The quality is extra fine and sweet. It matures as early as the Wakefields and will yield more to the acre in weight. The leaves are light green, small saucer-shaped and tightly folded, making it possible to set them close together in the field. **PRICE:** Packet, 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

**Ideal Best
Late**

**Cabbage in
Existence**

Ideal Cabbage You are no doubt looking for the BEST Late Cabbage there is grown. If so, don't look any further. We regard Ideal as the BEST or at least one of the best in existence. Its shape and general aspect are correctly illustrated above. It is a sure heading variety and can be depended upon to head 999 good, solid heads out of every 1,000 plants that have been well started, averaging 16 to 20 pounds. It is unequalled for cooking or slicing and is an exceptionally fine winter keeper. We can fully

recommend this Ideal cabbage to our customers everywhere and earnestly hope every cabbage grower will give it a trial. All our cabbage seeds were saved from the most choice selected heads and cannot be beat or equalled in excellency anywhere, at any price. **PRICE:** Packet, 10c; oz., 35c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Autumn King

Our Autumn King is a distinct variety and produces enormous, large, solid heads. The outside leaves are small and close up neatly to the cabbage head; thus can be planted closer together than ordinary sorts, which enables them to produce a greater weight to a given amount of land than other varieties—are a splendid keeper. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Flat Dutch Our strain of the Premium Flat Dutch Cabbage can not be excelled anywhere. Heads average 16 to 20 pounds, measuring 12 to 16 inches in diameter. Specially grown heads often weigh 50 pounds. Without exception one of the best winter keepers. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Mammoth Red Rock

The best variety of late red cabbage. Its sure heading, large size, solid as a rock and will please all who want the best red cabbage. **PRICE:** Packet, 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

Large Drumhead.

Holland Cabbage (The genuine stock.) This is the most remarkable cabbage yet produced. In fact, it illustrates the truth that "merit will win." While it was introduced only five years ago, it has become the favorite with all who have tried it. The heads are very solid and average about 8 pounds in weight; in point of quality they have no superior and keep better than any other sort, the head being as solid and perfect when taken up in the spring as when put away in the fall. **PRICE:** Packet, 5c; oz., 30c; $\frac{1}{4}$ lb., 80c; lb., \$2.75.

Large Drumhead

A favorite winter variety. Heads are solid and of good texture and have very few loose leaves, allowing of planting closely in the field. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Celery

ONE OUNCE WILL PRODUCE ABOUT 6000 PLANTS.

This we consider one of the luxuries of the garden. For first crop sow the seed early in botheds or in boxes in the house, in rich, moist soil, covering the seeds very lightly. For main crop sow seed in open ground in April or as soon as the soil is in good condition. Seed germinates slowly and if weather is hot and dry protect with light covering of hay or straw. Stir soil as soon as plants are well up; thin out and transplant so that they stand about an inch apart in the row. If they grow too rapidly sheer the tops off when about four or five inches high and this will make them more stocky. For main crop set plants out between June 15 and July 15 in rows three feet apart and the plants six inches apart in the row. Care should be exercised to firm the earth well around plants when setting and they will root better. Keep clear of weeds until about the middle of August, when it will be time to begin earthing up. Draw the soil against plants with a hoe as closely as possible, firming it enough to keep plants in an upright position. Late in the season the bleaching process must be finished by digging the soil from between the rows and banking it clear to the tops on each side of the row of celery. Much labor is saved by growing the self-bleaching varieties, but they do not keep as well for winter use.

30,000 PER ACRE \$ 900

Golden Self-Blanching. By far the Most Popular Sort

Golden Self-Blanching This is without doubt the most popular celery grown. It is a SELF-BLANCHING sort with little banking or covering. The outer ribs assume a beautiful golden yellow color, while the "heart" or vine stalks are deliciously tender, brittle and sweet. We offer two strains of this variety, viz: "PRIVATE STOCK" and "REGULAR" stock, and for the following reason: Some years ago we procured from

a celery grower in France some seed of the Golden Self-Blanching variety. That year there happened to be a good deal of trouble in many parts of the country with California grown seed of the Golden Self-Blanching celery; it did not blanch as well as usual, nor was the seed as pure. Our customers, of course, noted the difference in the quality between the French stock and the California stock, and have since insisted on having our French grown seed, no matter what the difference in price. In fact we have on several occasions, when the French stock of seed was very scarce and high in price sold it readily at from \$15.00 to \$25.00 a pound, when we were only asking \$3.00 a pound for the best California seed.

OUR PRIVATE FRENCH STOCK. PRICE: Packet 15c; oz. 40c; ½ oz. 75c; oz. \$1.25; ¼ lb. \$4.00; lb. \$15.00; Postpaid.

Regular Stock

PRICE: Packet 10c; oz. 50c; ½ lb. \$1.75; lb. \$6.50.

White Plume

Stalks, inner leaves and heart white and fit for use by simply tying up closely with soft twine. More used than any other variety by market gardeners. Our seed is of the highest quality and sure to please all.

PRICE: Packet 10c; oz. 35c; ¼ lb. \$1.00; lb. \$3.50.

Giant Pascal

Solid, crisp stalks of incomparable flavor. Strong growth, producing perfectly bleached stalks when hilled up properly. Of rich, nutty flavor. Blanchs 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 and early spring use it is excellent.

PRICE: Packet 5c; oz. 35c; ¼ lb. \$1.00; lb. \$3.50.

Winter Queen

Of short, stocky growth, broad, heavy stalks. Fine for winter use.

PRICE: Packet 5c; oz. 25c; ¼ lb. 75c; lb. \$2.50.

White Plume.

Chicory Root used when dried as a substitute for coffee; the sprouts when forced in the dark are used for salads.

CULTURE—Sow in spring, in drills 18 inches apart, one-half inch deep.

Witloof Chickory or French Endive The famous winter salad so popular in first-class restaurants. Forms leaves like Cos lettuce and can be eaten raw as salad or boiled. Being available in winter will make a profitable crop. Cultural directions on each package.

PRICE: Packet, 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50; Postpaid.

Chervil Curled. Treat like parsley. A valuable flavoring herb.

PRICE: Packet, 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Collards (One ounce will produce about 3,000 plants.) Collards are largely used as "greens" in some parts of the country, especially south. They are a form of loose-headed cabbage.

Georgia The most satisfactory for general use. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Corn Salads Broad-Leaved, Large-Seeded — A delicious salad used during the winter and spring as a substitute for lettuce, and also cooked and used like spinach. It will mature in six weeks. Sow in early spring in drills a foot apart, or for winter use sow in September and winter over like spinach. PRICE: Packet, 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

One ounce will sow 18 square feet, and 6 pounds will sow an acre.

Cress All the types described below are grown for the refreshing piquancy of the leaves, being used as an appetizing salad or for garnishing various dishes. One ounce will sow two hundred feet row.

Early Curled Well-known salad. Sow at intervals all season. PRICE: Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

True Water Sow seed along the border of running water. PRICE: Packet, 10c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.

Upland Cress A perennial variety; hardy, produces well; same flavor as Water Cress. Grown on high, dry land; does not run to seed rapidly. PRICE: Packet, 10c; oz. 35c; ¼ lb., \$1.00; lb., \$3.50.

Broccoli (One ounce will produce about 3,000 plants.) Growth and habit like the cauliflower, except that it is more hardy, and the heads are not as compact. Not desirable for warm or dry countries, but of special value in the north. Cultivate and use the same as cauliflower. PRICE: Packet, 10c; oz., 50c; ¼ lb., \$1.50; lb., \$5.00.

Brussels Sprouts (One ounce will produce about 3,000 plants.) Of the cabbage family, producing numerous heads on the stem, of most delicious quality, as well as the cabbage-like head at the top. Use and cultivate the same as winter cabbage. PRICE: Packet, 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

Henderson's Snowball Cauliflower.

Cucumbers

(One ounce will plant 50 hills, two pounds will plant one acre.)

Cucumbers succeed best in a rich, loamy soil. For first early, sow in hotbeds, in berry boxes or in small flower pots, six weeks before they can be set out in open ground. When danger of frost is over transplant in hills four feet apart each way. For general crop plant in open ground in May, about twelve seeds in a hill. When danger of bugs is past thin to four strong plants in a hill. For pickling, plant in June. Sprinkle vines with air-slacked lime, or use Slug Shot, to protect them from bugs.

Perfect White Spine This improved strain is pronounced by good judges superior to all others. Fruit even and good size, straight, well formed and symmetrical. It is of uniform shape, making it unexcelled for pickling. Immensely productive and keeps a long time. See illustration. **PRICE:** Pkt, 5c; oz., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Enameled Perfect.

Improved Chicago Pickle Illustrated in lower right hand corner. A variety which originated with a leading pickle grower near Chicago; is considered the best variety there; very prolific; matures early, produces immense numbers of fine shaped pickles. **PRICE:** Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Early Cluster Slim form. Extra prolific, frequently setting in clusters of two and three. Fine for small pickles. If fruit is kept gathered, the vines will continue in bearing. **PRICE:** Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.25.

Davis Perfect By using this variety gardeners can produce out-of-door varieties that will sell in the market for hot-house forcing varieties. The shape is ideal. It is almost seedless one-third of its length from the stem, and the few seeds are hardly noticable. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Improved Long Green Fruits average ten to twelve inches in length. Skin a deep rich green; flesh solid, crisp and of excellent quality. This is an extra selected strain of the original type and can be depended upon to produce the true long dark green fruits, excellent alike for slicing or pickling. **PRICE:** Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Cauliflower

(One ounce will produce about 3,000 plants.) One of the most delicious of vegetables. Cabbage and cauliflower requirements are quite similar, except that the latter need a cool and moist atmosphere and should be watered in dry weather. As the flower heads form, the large leaves should be broken down over them to shield them from sun and rain.

Danish Dry Weather A strong competitor for first place. Heads extra large, pure white and very solid. Has large leaves which protect the head. About 10 days later than Snowball, but has proven more desirable for growing in open ground and does well in dry seasons when other varieties show failure, keeping plump and fresh during the hottest, driest weather. **PRICE:** Packet, 15c; $\frac{1}{4}$ oz., 75c; oz., \$2.75; $\frac{1}{4}$ lb., \$7.50; lb., \$27.50.

Henderson's Early Snowball

Considered the earliest and more certain to make a head than any other sort. Its dwarf habit and short outer leaves allow it to be planted as close as 18 to 20 inches apart each way, thus making it especially valuable to market gardeners. Our stock is extra choice, and cannot be excelled. We believe it to be the best in the world. **PRICE:** Packet, 20c; $\frac{1}{4}$ oz., 85c; oz., \$3.00; $\frac{1}{4}$ lb., \$8.00; lb., \$30.00.

Extra Early Dwarf Erfurt Is valuable for forcing. A very popular variety. First quality **PRICE:** Packet, 15c; $\frac{1}{4}$ oz., 75c; oz., \$2.00; $\frac{1}{4}$ lb., \$7.50; lb., \$27.50.

Early Paris Well known small sort which is usually quite satisfactory. **PRICE:** Packet 10c; $\frac{1}{4}$ oz., 50c; oz., 90c; $\frac{1}{4}$ lb., \$2.50; lb., \$9.

Perfect White Spine.

Early Express Extra Early The most remarkable and valuable new variety which originated with Mr. C. P. Coy. It is by all odds the earliest variety in existence. Quality is the very best, being free from any rank, strong flavor, and it is a fine variety for slicing as any later sort. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Enameled (Perfect) This new cucumber we bred up for extreme earliness and quality. It certainly has proven itself the earliest cucumber that we know of and one especially adapted to the hotbed or early garden. It sets its fruit quickly and produces beautiful cucumbers in the shortest possible time, and if kept picked will continue bearing for a long time. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Chicago Pickle.

Sweet or Sugar Corn

Golden Bantam

Is more firmly fixed in popular favor because of its extreme early character, vigorous growth and surpassing delicious flavor. The stalks are dwarf and sturdy in habit, growing to a height of four feet. They bear 3 to 5 good ears five to seven inches in length, have eight rows of broad, yellow grains, extending to the extreme tip. Market gardeners find **GOLDEN BANTAM** their most profitable variety throughout the season (from successive plantings). It is as distinct in flavor from that of white varieties as in color—being almost literally "sweet as honey." The skin is so exceptionally tender that it does not need scoring or cutting across the grain. **PRICE:** Packet, 5c; $\frac{1}{4}$ lb., 15c; lb., 40c; 3 lb., 1.00; Postpaid.

Golden Bantam.

Extra Early Corn (White Cob)—(No. 8) This was for years the most popular variety with market gardeners for first early until the introduction of Early Sunrise. Dwarf growth and yields well; ears medium fine. **PRICE:** Packet, 5c; $\frac{1}{4}$ lb., 15c; lb., 40c; 3 lbs., 1.00.

Early Minnesota A standard early variety that has held a high place in the list of sweet corns ever since its introduction. The ears are of good size, well flavored and of the best cooking qualities. Valuable for either private or market use. **PRICE:** Packet, 10c; $\frac{1}{4}$ lb., 15c; lb., 40c; 3 lbs., 1.00.

Crosby's Early For medium early use and general crop this is one of the most desirable varieties. Ears are of medium size and the cooking qualities excellent. A good cropper and profitable for family use and as a market sort. **PRICE:** Packet, 5c; $\frac{1}{4}$ lb., 15c; lb., 40c; 3 lbs., 1.00—Prepaid.

Peep o' Day Originating in the far north this variety is therefore extremely early in maturing. Besides this important feature it is a "Sweet Corn" in the true sense of the word, being remarkably sweet and tender. The stalks grow about four and one-half feet high, and are usually very prolific, producing from two to five ears each, which measure about five inches in length and are well filled. **PRICE:** $\frac{1}{4}$ lb., 15c; lb., 40c; 3 lbs., 1.00.

Mammoth White

The largest and best
The stalks are

Peep o' Day—The Earliest Sweet

We Give Particular Care and Attention

Improved Egg Plant

New York Spineless Egg Plant.

Our superior stock of this popular variety produces a large crop of shapely purple fruits of liberal size and perfect quality.

The plant is of low growth with a vigorous branching habit, strong enough to support its massive fruits, and compact enough to economize space.

It is very prolific, the fruits are of a pleasing purple color, and the quality superb. PRICE: Packet, 5c; oz., 50c; ¼ lb., \$1.75.

Early Long Purple The earliest variety in existence. PRICE: Packet, 5c; oz., 50c; ¼ lb., \$1.75.

Black Beauty The earliest and best of all large fruited egg plants. The large fruits are thick, of most attractive form. The skin is a rich, luscious, purplish black. The fruits set freely and develop quickly so that the entire crop can be gathered before there is any danger of frost. PRICE: Packet, 5c; oz., 50c; ¼ lb., \$1.75.

Kohl Rabi

One ounce to 3,000 Plants.

A popular vegetable intermediate between the Cabbage and the Turnip. Sow in drills from May to July. It is extremely tender and partakes of the flavor of both Turnip and Cabbage. Should be in every

purple
a

urple.
tems
ur-
et,

Endive

(One ounce will sow about 60 sq. ft.)

Preferred to lettuce by those who have tried it and should be more largely used. One of the best and most wholesome salads for fall and winter use. Sow seeds in April for early use or in June or July for winter use. When leaves are 8 inches long tie together with a string near top to blanch.

Green Curled Has finely cut leaves and makes a handsome plant. PRICE: Packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.40.

Giant Fringed Also called winter lettuce. This fine new variety is the best of all. It is a strong, vigorous grower, making a large, white heart, and the leaves are beautifully curled, and of best quality. PRICE: Packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Gourds Cultivate like cucumbers; may be trained over lattice work, fences, etc.

JAPANESE NEST EGG—Grows uniformly about the size, color and shape of a hen's egg. The shells are hard and make the very best of nest eggs, as they do not crack. The largest ones, when sawed in two, make excellent pots for starting tomatoes, strawberries and other plants. PRICE: Packet, 5c; oz., 25c.

DIPPER—Makes a lighter and more convenient dipper than can be bought. Dippers of various sizes of a capacity from a pint to a quart and a half can be had from a few vines. PRICE: Packet, 5c; Oz., 25c.

MIXED UTILITY—Seeds mixed. This is very popular with our customers. Many grow them as curiosities, but they are really useful in many ways. They are easily grown and will repay the work expended. PRICE: Packet, 5c; oz., 25c.

Ornamental Mixed A mixture of odd-shaped and fancy-colored sorts. Many handsome useful and small gourds in this mixture. Also planted among ornamental climbing flowers. PRICE: Packet, 5c; oz., 30c.

Leek

Leek is closely allied to the Onion. The entire lower portion of the plant is used, which is smooth and solid and is very generally used as a vegetable and in soup.

Sow early in spring and when 6 inches high transplant into rows 6 inches apart each way and as deep as possible, to perfect the bleaching process. The richer the soil the finer the Leek. One ounce to 100 feet of drill.

LARGE AMERICAN FLAG LEEK—A favorite variety. PRICE: Packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

MUSSELBURG OR SCOTCH CHAMPION—Grows to a large size. PRICE: Packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Large American Flag.

Mustard Used as a condiment and the green leaves are also used as a salad or boiled like spinach.

SOUTHERN GIANT OR CHINESE—In great demand on account of its large, crimped, frilled, bushy and prolific leaves. PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 75c.

ELEPHANT'S EAR—A new variety with numerous tremendously large, broad leaves of good substance and of most appetizing pungency; they are of light green color and have large white ribs. PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 75c.

Chufas A nice little ground nut greatly liked by children. Its flavor resembles the cocoanut. Very prolific, a single yielding 200 to 400 nuts growing just under the ground. Grow in light, sandy soil, well fertilized. Plant in April, 10 inches apart, in foot rows. Cover lightly. Soak seed before planting if very PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Garlic **GERMAN, Knoblauch; FRENCH, Ail**—The Garlic is the most pungent in taste and has the strongest odor of all the family. It is largely used in the south of Europe, where it is used for flavoring soups, stews, etc. The root or bulb is composed of small bulbs, called "cloves," which are planted in the spring. Frequently receive orders for Garlic seed, but can supply the bulbs. Fine Bulbs, ¼ lb., 25c; ½ lb., 40c; lb., 75c.

ARE APPRECIATED ON TRIAL.

Superior Lettuce Seed

(One ounce will sow 100 feet of drill.)

No vegetable is more universally used than lettuce, and to be thoroughly appreciated it must be brought to the table fresh and unwilted. Quality depends upon rapid and vigorous growth. Sow in

hotbed in March and in open ground as early as it can be worked, thinly in drills one foot apart. For succession, sow every three weeks during season. Thin out plants as they grow.

Grand Rapids Lettuce

This grand lettuce delights all who grow it. It is equally suited for the market gardener and the private planter. The market gardener will find that this lettuce will command a premium over other sorts on account of its appearance and quality, while for private gardens no other lettuce approaches it for table use. For salads it is unequaled. A forcing variety of superior quality and appearance, strong grower, free from rot, and keeps crisp and tender without wilting when exposed for sale longer than any other forcing lettuce. It is also a desirable variety for sowing in open ground. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 45c; lb., \$1.50.

EARLY CURLED SIMPSON

—An improved variety of Curled Simpson, with large, loose head and excellent flavor. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

CALIFORNIA CREAM BUTTER

—A cabbage lettuce, with round, solid head, outside medium green, slightly marked with small brown spots; within, leaves are very rich cream yellow color, rich and buttery to the taste. Heads good size, compact, very hard and solid. In California they eat the heart only, with a dressing of olive oil, vinegar, salt and pepper. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

ICEBERG

—Has unusually solid head, is quick growing and always crisp and tender, whether propagated in early spring or in the hot days of summer.

Grand Rapids Lettuce.

PRICE: Packet, 5c; oz., 15c; 1/4 lb., 45c; lb., \$1.50.

May King

A very early variety of head lettuce of compact growth. The inner leaves are a bright yellow, the outer ones a light green, sometimes slightly tinged with brown. Its greatest claim to popularity is in quick and rapid growth, making it extremely tender and brittle. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 45c; lb., \$1.50.

RELISH, or Improved Big Boston—We are greatly pleased with this fine new variety. Is one of those rich, buttery-flavored sorts, which when accustomed to, is preferred to the crisp-leaved varieties. It is the blanched yellow center of the head that is eaten. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

IMMENSITY—Enormous solid head variety, sometimes 18 inches in diameter, but still tender, crisp and of excellent quality. A reliable sort. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

DENVER MARKET—An early variety of head lettuce either for forcing or open ground. Large, solid heads, light green color, and is very slow to go to seed. Leaves beautifully marked and blistered, very crisp and tender. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

Improved Hanson

For general use for market and gardeners we are sure that no variety can surpass our "Improved Hanson" Lettuce. Deliciously sweet, crisp and tender, and absolutely free from any rank or bitter taste. Resists the summer heat extremely well. It cannot be too highly praised. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 45c; lb., \$1.50.

SALAMANDER—An excellent spring, summer and fall variety, forming good sized heads. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

BLACK SEEDED SIMPSON—It is light colored, grows large in size; of fine quality. One of the best for forcing or outdoor planting. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

MIXED LETTUCE—A number of the best kinds in mixture. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

ORDERS—We like to get them—the more orders the better we like it. Do not hesitate even if the order is small we give just as much attention to a 10c order as we do to an order amounting to \$10.00 or more.

Early Prizehead

Early Prize Head

It forms a mammoth head and remains tender and crisp throughout the season; is prompt to head, but slow to seed, of superior flavor and very hard. Leaves of dark reddish brown color, variegated with dark green. It is an immensely popular variety. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

Market Gardener

This is one of the very best of the "Butter" head lettuces. It is a favorite with market gardeners on the city markets, and holds the lead in point of popularity. This is equally true in other markets. PRICE: Packet, 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.25.

Burrell Gem.
A Red Fleshed Rocky Ford.

Gentlemen—Your Burrell's Gem Muskmelon is certainly a dandy. From one packet of seed we have had all the melons we could eat for home use, and there are five of us in the family. They are the best melons I have ever tasted.

Grand Rapids, Mich.

Yours truly,
GEORGE BANNER.

Emerald Gem One of the most delicious little melons that we have ever eaten. The flesh is thick, of a suffused salmon color, almost red, and ripens thoroughly to the extreme thin rind. It is peculiarly crystalline in appearance, juicy and rich. The flavor is sweet and luscious beyond description, small but very fine for home use. PRICE: Packet, 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Thoroughbred Rocky Ford Muskmelon

Sweet and Luscious—World-Famous for its Captivating Flavor. **ROCKY FORD** has proven to be a most valuable muskmelon; its size, shape and quality exactly suit the epicure. It somewhat resembles the old Netted Gem, but is more oval in shape. The vines are exceedingly healthy and vigorous, bearing an enormous quantity of fruit during the entire season. It is safe to say that no melon has ever come into the market which has sold so readily and at such high prices as the Rocky Ford, often to the exclusion of other varieties. The color of the skin is of a rich, greenish-gold; the netting is prominent and light in color; appearance very attractive. The flesh is very deep, ripening clear to the rind; very solid, yet thoroughly melting, and it has an exceedingly small seed cavity. **IT IS VERY SWEET AND LUSCIOUS IN FLAVOR.** Our seed was specially grown for us by a careful grower at Rocky Ford, and is the best type of the genuine Rocky Ford Muskmelon. It has been used in many sections and pronounced by melon growers a very superior strain. PRICE: Packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25.

Bard, Texas.

Gentlemen—Please send us your seed catalogue. I have always had splendid luck with my garden seeds that I ordered from you. I hope I will receive a catalogue in time so as to send you my order for seeds in good time for planting.

A. F. CLIFFE.

Muskmelons or Canteloupes

CULTURE—Plant seed in hills 4 to 6 feet apart each way, after danger of frost is over. Use well rotted manure in the hills. Insert seed just under surface of soil; 1 ounce to 60 hills; 3 pounds to acre. Thin out, leaving only 4 plants to a hill. A light, warm soil is best, but there are varieties adapted to heavy loams, if well drained. In hoeing draw the soil well up to the plants. Fight bugs with tobacco dust, Slug Shot, air slacked lime, land plaster or Bug Death.

The Burrell Gem Muskmelon A Red-fleshed Rocky Ford. This new red fleshed cantaloupe is ideal for either the home garden or for market. The rather elongated fruits average six inches in height, four and one-half inches and weighs about two pounds each. The flesh is red-orange, is very thick fine grained and deliciously rich and spicy in flavor. **SEED CAVITY REMARKABLY SMALL**; the rind is thin but tough. Color green, closely interlaced with gray netting; ribs well arched. The vines are very prolific and the culture profitable. PRICE: Packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.25.

Extra Early Hackensack We offer under this name a very distinct stock, and much superior to that often sold as Extra Early Hackensack. The fruit is medium sized nearly round, with deep ribs and very coarse netting. The flesh is green, a little coarse, but very juicy and sweet. PRICE: Packet, 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

Jenny Lind This is the earliest of the green fleshed sorts and one of the sweetest. It is round or flattened. In size it is small, being from three to five inches in diameter—a very convenient size for serving in halves. It is more largely grown in the great melon producing states than any other sort, and is used in enormous quantities in the cities and at resorts. The vines are very prolific and the culture profitable. PRICE: Large packet, 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00; Postpaid.

Rocky Ford

New Honey Dew Muskmelon

A Wonderful New Melon Sold at Fabulous Prices in All Leading Markets.

(Green flesh.) Honey Dew is a new type of muskmelon, and is the result of crossing the Rocky Ford with a South African melon. They grow uniform in size, about 6 inches in diameter from top to bottom and 7 or 8 inches long. The color is a dull white when ripe having no netting. The rind, though thin, is very tough and so close that the excellent flesh is practically sealed up where it keeps in fine condition for several weeks after they are ripe. The flesh is a rich green color, very sweet and possesses a delightful flavor. The vines are more productive than the ordinary kinds and the muskmelons are superior shippers. The seed we are offering was grown from the originator's stock by one of the best melon growers in Rocky Ford, Colorado. We have only a limited supply of the wonderful melon so advise ordering early. PRICE: Packet, 10c; oz., 30c; ¼ lb., 90c; lb., \$3.25.

Gentlemen: I had the pleasure of seeing your Magi Queen Tomato grow last year and was so delighted with it that I determined to try it. I have included some in my order for seed this year.

Ceryell, Texas, February 5.

Very truly,
D. B. LOVEJOY.

Paul Rose, or Petoskey

Combines all the good qualities of the Netted Gem and Osage, the varieties from which it originated, possessing the sweetness of the latter, with the finely netted appearance of the Gem. Fruit oval, about five inches in diameter, shape and general appearance similar to the Netted Gem; of a light green or faint golden hue when fully ripe. Firm flesh, a rich orange like the Osage, but even sweeter and higher flavored; ripens close down to the rind with small seed cavity; the most uniformly good of any muskmelon grown. Best shipped just the size for hotels and table use. Really has no equal as a market melon for professional growers, and one of the very best sorts for the home garden. An exceptionally pure and fine stock. PRICE: Packet, 5c; oz., 15c; ¼ lb., 35c; lb., \$1.25; Postpaid.

Paul Rose or Petoskey.

Canteloupes

—Continued

Grand Prize Winner

New Improved Rocky Ford "Gem of Eden" Rustproof

This type is the highest development, both as to netting and rust-resistant qualities, yet attained in the Rocky Ford Canteloupe. When vines of some varieties are entirely killed by rust and blight within two weeks after the shipping season, the vines of this variety are green and continue to blossom and set fruit until frost. The melons run very uniform in size and the exceptionally heavy netting is laced and interlaced over the entire surface, making it an ideal shipper. The flesh is green, shading to salmon about the seed cavity which is unusually small. The meat is solid and fine grained, flavor unexcelled. While a few days later than the Early Hackensack, it is more prolific. Desirable where there is an excessive rainfall. **PRICE:** Packet, 10c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.25.

MIXED MUSK|MELONS
A mixture of varieties desirable for the diversity it offers, making an appeal to all different tastes. **PRICE:** Packets, 15c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., \$1.00.

Gem of Eden.

Osage Melon or Miller's Cream

One of the best melons on the market for family use and also greatly liked by gardeners. The skin is thin, dark green color and slightly nettled. The flesh is salmon color, remarkably sweet and spicy in flavor; extremely thick and delicious to the rind. The seed cavity is very small. It is seldom that one of poor quality is found. The whole crop is very even and extra heavy owing to the thickness of the meat. All lovers of fine melons should try the Osage. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Osage Melon or Miller's Cream.

Improved Green Nutmeg A greatly improved strain of the old Green Nutmeg. Fruit medium size, very rich and melting; flesh light green. Is very productive. The original was a standard sort for many years, and is one of the best main crop sorts. **PRICE:** Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

New Grand "The Grand" is 10 to 14 days earlier than the Osage, under the same conditions. It is salmon-fleshed, and is of remarkably uniform size; the flavor very fine. It sets fruit near the roots, has a vigorous vine and resists disease better than most sorts. Fruit average about 6 inches in diameter. Extra choice seeds, saved by the originator especially for us. **PRICE:** Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Watermelons

THE WORLD'S BEST VARIETIES

Culture A light, sandy soil, with a good exposure to the sun, is the best situation to plant Watermelons. The ground should be prepared deep, but receive shallow cultivation. Hoe often and very thoroughly. 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. Plant 8 or 10 seeds in each hill, and finally, when danger

from insects is past, thin out to three strong plants. Packets are about right for small gardens. One ounce of seed will plant 20 to 30 hills; 4 pounds will plant an acre.

Special Prices to Large Growers Who Mention Varieties and Quantities Required.

OUR MELON SEEDS PLEASE EVERYBODY. THEY GROW BIG FINE MELONS EVERYWHERE

Our Special Stock of Melon Seed is saved from Hand Cut, Personally Selected, Thoroughbred Specimens, distinctly marked, uniform in size—Ideal Shape—Color and Flavor; fully developed, insuring the highest of perfection. CHEAP SEED is generally saved from CULLS of crop after the BEST specimens are marketed. If you want the BEST SEED THAT CAN BE GROWN, let us have your order.

If you want the cheapest seed that is offered, send to the fellow who is offering them cheapest.

Our Seed, both Watermelon and Muskmelon (Cantaloupes), are saved from crops grown exclusively for seed purposes. No Seed is taken from Watermelons weighing less than 15 pounds, and seed from Cantaloupes that show perfection in every detail.

New National Melon

The main reason we gave this fine melon the name "NEW NATIONAL" was because of its proven ability to flourish anywhere and everywhere any melon can be grown. The National is of medium to large size and of very high quality. Our seed of this melon originally came from some fine specimens shipped into this city from the South, and being of such superior quality, we saved the seed and planted them on our farms near this city, and from them obtained our start, and have now been distributing the seed of this melon for the past five years, and everywhere it has proven a great success. In shape it is oblong. The outside color is dark green with light colored striped markings. The flesh is brilliant red in color and remarkably solid. The flavor is delicious, and entirely stringless. The rind, though thin, is tough, insuring good shipping qualities. The National produces large melons, often weighing 40 pounds and over. Its uniform and handsome appearance, with luscious flavor, makes it a rapid seller, and for the home garden it has no equal. We wish to urge you to be sure to order and obtain some seed of this fine melon. PRICE: Packet, 10c; oz., 20c; ¼ lb., 50c; lb., \$1.50.

New National Watermelon.

Plant the "Tom Watson" Watermelon---Grand Old Favorite

"TOM WATSON" WATERMELON.

There are a few people that agree with Tom Watson's political views and many that don't. However, we never have seen anybody that didn't acknowledge that the Tom Watson Watermelon was the best melon they ever grew. We have watched this melon for several years and grew it in our seed crop last year. It's an all right melon in every respect. It has the best of eating qualities and it stands shipment as well as the best of shipping melons, such as Seminole Champion, Kelh Gem and others. If you grow the Watson melon you have something that sells on sight in all the markets at a good price; it stands shipment perfectly and if you eat it at home you won't find it inferior to the Monte Cristo, Kleckley or Alabama Sweets. The Watson is an allright combination melon, good at all times and for all purposes. PRICE: Packets, 10c; oz., 15c; ¼ lb., 35c; lb., \$1.00; Postpaid.

Gentlemen: We have a lot of Watermelon Seed of different varieties, for sale. They were saved from choice fruits, grown from the seed we obtained from you, consisting of the "Tom Watson" and other varieties, all true to name. Our crop was planted on poor sandy land and it was so dry they did not require much cultivation, but done fine—we sold eight carloads, running from 1300 to 1500 to the car, weighing from 30 to 70 pounds each; besides, we sold a good many to our local trade and still the ground was covered with even much finer melons than we sold, as we had some late rains that stimulated a second crop and better than the first. But the market being glutted by the time they were ripe, we seeded the best of them, and now want to find a market for them—therefore, since we bought the seed from you, we wish to give you the first chance on them. Each variety has been carefully kept separate to themselves. Enclose find photograph showing a few of them when loading them on the cars. Please let us have an early reply. If you can use them make us your offer, f. o. b. our station.

Grant Co., Oklahoma, October 3.

Very truly yours,
E. A. SHIRE & BRO.

Watermelons The World's Best Varieties

Monte Cristo, or Kleckley

Sweet Special strain of this grand market gardener's melon. Large, oblong, 26 inches in length by 10 to 12 inches in diameter, dark green, flesh bright scarlet, rind only about 1/2 inch thick. Extremely sweet and sugary and of such tenderness that it leaves no strings or pulp whatever. It is a melon for home use, but ships very well. Undoubtedly one of the best melons of today. We paid \$1.50 per pound for the first seed received from the originator and have made a specialty of improving this variety. We are absolutely certain there is none better. This variety is most reliable and you can depend on having fine melons when you plant our seed. **PRICE:** Packet, 5c; oz., 15c; 1/4 lb., 30c; lb., \$1.00.

Mountain Sweet The old standard. Best quality. **PRICE:** Packet, 5c; oz., 10c; 1/4 lb., 30c; lb., \$1.00.

Alabama Sweet

Alabama Sweet is a dark green melon with light seeds. It is first class. It is of good size, though not ungainly like Humph. Its flavor is simply delicious. Its outside appearance is attractive. Its size and shape are such as to make it a first rate business melon. It has been fully tested, and I am confident it will be a prize winner in all melon growing sections. **PRICE:** Packet, 5c; oz., 15c; 1/4 lb., 30c; lb., \$1.00.

Georgia Rattlesnake

Georgia Rattlesnake is the variety that made Georgia famous as a melon state. No place in the world produces such melons as Georgia. No one has such seed of the Georgia variety as ourselves. It is simply perfection. Every seed of it is from melons weighing 30 pounds or over. **PRICE:** Packet, 5c; oz., 15c; 1/4 lb., 30c; lb., \$1.00.

Sweetheart Melon.

Sweetheart Melon This melon is early, large, handsome and heavy and productive. Shape is oval; color, very dark green. Flesh bright red, solid, tender and very sweet. **PRICE:** Packet, 5c; oz., 10c; 1/4 lb., 25c; lb., 85c.

Black Diamond It is vigorous, and earlier than any standard variety. Is immensely prolific, one melon grower loaded five cars from five acres of it and then had large quantities of salable melons left. The melons in these cars averaged 34 pounds each. Melons are of very uniform shape and as good in shipping as Kolb's Gem. Of a deep, glossy green color when ripe, which gives them the appearance of having been varnished. **PRICE:** Packet, 5c; oz., 10c; 1/4 lb., 25c; lb., 85c; Postpaid.

New Champion A cross between Kolb's Gem and Sweetheart. All that could be said of KOLB'S Gem as to good shipping qualities can be fully stated in a higher degree of NEW CHAMPION. All the praise of high quality awarded on the Sweetheart can be repeated of this new melon, but its prominent point of merit is its extreme size. **NO MELON EVER PRODUCED ANYTHING LIKE SO FORMERLY LARGE FRUIT, NOR APPROACHES IT IN PRODUCTIVENESS.** Melons weighing from 40 to 60 pounds are common. It is the most prolific watermelon known. Its color is a rich, dark green with colored markings. Of uniform, symmetrical shape, roundish to bluntly oval, and similarity of shape running through the field. **PRICE:** Packet, 10c; oz., 20c; 1/4 lb., 50c; lb., \$1.50.

New Champion

OUR WATERMELON SEEDS ARE TAKEN FROM FIRST CLASS SELECTED MELONS ONLY.

Watermelons THE WORLD'S BEST VARIETIES

First Class Seeds Please Everybody

Watermelon Seed is one of our leading specialties. We sell many tons every season.

Atlanta, Ga.
Gentlemen: Kindly quote me your best prices on 40 pounds Ton Watson melon seed. I used your melon seeds last year and had splendid success.
Yours truly,
C. B. CARRUTHERS.

Beford, Ky.
I have ordered my seeds from you for the past five years and have always had excellent results and success from them. Enclosed find my order for seeds again this year.
MRS. MARTHA WALKER.

Mixed Watermelon

Twelve varieties of the fine watermelons, the largest, earliest, sweetest, grown separately and seed carefully mixed by us. PRICE: Packet, 5c; oz., 10c; ¼ lb., 30 lb., \$1.00.

Seminole Watermelon Here is a melon that may be styled an old-timer, for it has stood the test of time, always and everywhere proven to be among the best, earliest, surest and most productive. It is one of the sweetest, juicy melons there is grown and among the earliest to produce ripe fruit. A beautiful red core makes it very attractive and its fine quality makes it most delicious to the craving appetite during the long hot summer days, when nothing is so appetizing as a nice melon just plucked from the vine. The above illustration shows its exterior and beautiful shape better than we can describe it—one of the first to bear and longest to continue bearing its fruit. PRICE: Packet, 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Mammoth Ironclad The rind, while very thin is remarkably hard. One of the best. Immense size, handsomely marked, oblong shape, flesh bright red and very solid. PRICE: Packet, 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Kolb's Gem This variety on account of its excellent shipping qualities, is extensively grown for that purpose. Grow nearly round, and the color is dark green, with light narrow stripes; very thick and tough rind. Flesh light red and good flavor. Our seed is choice. PRICE: Packet, 5c; oz., 15c; lb., 30c; lb., \$1.00.

The Oklahoma Gem (Last but not least—one of the very best.) Mammoth Ironclad of immense size, running from 35 to 40 pounds each. They are uniform in size, oblong shape, handsomely marked, flesh scarlet red and very solid, juicy and the sweetest melon ever ate. The rind is remarkably hard and tough, which makes it a long keeper and splendid shipping melon, one of the best we have any knowledge of. They are sure the finest melons. PRICE: Packet, 5c; oz., 15c; ¼ lb., 30 lb., \$1.00; Postpaid.

Apple Pie Melon

Don't Fail to Try It This novelty of unusual value will appeal to our customers. Fruit and vine grow similar to the watermelon, but flesh is used exclusively for sauces, pies and preserving, etc., having a most delicious flavor, resembling the flavor of apples. Flesh white and solid. Each vine produces 5 to 15 melons; one of large size will make as many pies as a half bushel of apples. They keep fresh and solid all winter, so can be used when wanted. It will pay to raise them. This melon is not for eating in its raw state, but for preserving, and largely used for this purpose. PRICE: Packet, 10c; oz., 20c; ¼ lb., 60c; lb., \$1.75.

Colorado Preserving This is a large fruiting strain of citron for preserving. The flesh is clear white and very solid. Green seed. PRICE: Packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

Red Seeded Citron Is round, dark-green, striped and mottled with light green. PRICE: Packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

A WORD TO MELON GROWERS AND OUR MELON SEED TRADE

We are headquarters for all kinds of the best Melon Seeds and foremost varieties. Also all kinds of Vine Seeds. Strange as it may seem, our melon and vine seed trade is no penny-wise part of our seed business. There is scarcely an order comes to us that does not include melon seeds. In fact about everybody who plants seeds of any kind, plant melons, some only a few hills, others a half acre and others from one acre to 15 or 20, and a few as much as 25, 50 or 100 acres. Everybody likes melons—everybody eats melons. There is nothing more palatable, or relished more than melons, on the table, along the roadside, in camp or out in the field where one is at work, when they want to take a little rest. In view of the great demand for the best kinds and varieties we have for many years given our closest attention to the wants and requirements of this line of our trade—one of our leading specialties—going to great expense in visiting melon seed growers and localities where melon and vine seed growing is made a specialty—strictly in the interest of our trade and for the benefit of our customers. As a result of this care and expense we are pleased to say, we venture the belief that we have a trade along this line unparalleled by any seed

house in the West. Every pound of our melon and vine seeds grown under special contract by private but experienced growers to whom we make special contracts, and while we have every confidence in the integrity of our growers, we take no man's word on quality of purity of our seed stock, as there is so much at stake, considering large trade and the welfare of our customers. Therefore we have representative on the ground at time of saving seed to carefully inspect the stock from which our seed is saved and no melon is allowed to cut for our seed that does not come up to the contract; first-class standard and quality. Our representative remains with the grower until the seeds are washed, dried, sacked, and put aboard the cars for shipment. Thus it must be patent to anyone, that when we pay premium price and extra expense to obtain select stock for the seed and protection of our customers, we cannot compete in prices with those who buy commercial seed, saved from culls, big, little, and all kinds of melons that simply contain seeds. But if you want the best, high grade and best varieties, true to name, we want your order, big or little. But if you are looking for cheap melon seed, send to the fellow who offers them the cheapest.

RELIABLE ONION SEEDS ONE OF OUR LEADING SPECIALTIES

The Best Seed a Necessity There is no crop which depends more upon the quality of the seed than the Onion crop. **GOOD ONION SEED** is of vital importance. If you expect satisfactory results. The seed we offer is not surpassed anywhere; have been thoroughly tested for vitality, so that success is certain, where soil and season are favorable, and is equally sure to produce a crop and an

abundance of Onions. **OUR ONION SEED CANNOT BE EXCELLED** in purity, vitality or high quality.

Culture Onions do best on a rich loam. Stiff clay and light sand are equally unfavorable. Drill 4 to 5 pounds of seed per acre, $\frac{1}{2}$ inch deep. Onions are produced the first year from spring sown seed. Culture should be frequent, though shallow. Winter storage demands dryness and protection from sudden changes. Onions should never be handled while frozen.

For general purposes, the country over, no variety is more largely grown. The largest, most uniform, heaviest yielder and the best keeping of all the red onions. This is a standard red variety. Large size; skin deep purplish red; form round, somewhat flattened; flesh purplish-white. We recommend it as a general cropper and a variety that will do well anywhere that onions can be grown. One of the best keepers. Yields enormous crops. Our stock of Large Red Wethersfield Onion Seed is personally selected by us and excelled by none. **PRICE:** Pkt. 10c; oz. 20c; quarter lb. 75c; pound \$2.75.

The World's Greatest Red Onion.
Yields 1,000 Bushels per Acre, Leading All Other Varieties

Always Commands First Attention in the Markets

Mammoth Silver King

Yellow Globe Danvers A handsome round or globe shape, of large size, with thin, yellow skin, white flesh, fine grained, mild, firm, and the best of keepers. Ripens early, sells readily at highest prices in markets. This is one of the best cropping varieties; has yielded 1,000 bushels per acre. **PRICE:** Packet, 10c; oz., 20c; $\frac{1}{4}$ lb., 75c; lb., \$2.75.

Mammoth Silver King Of attractive form, flattened, but thick through bulbs, often attains weights of from $2\frac{1}{4}$ to 4 pounds. Skin and flesh white, mild and pleasant flavor; matures early, of uniformly large size and always bring a good price in market. **PRICE:** Packet, 10c; oz., 20c; $\frac{1}{4}$ lb., 75c; lb., \$2.75.

Mammoth Prize Taker.

Southport Red Globe Our strain of this onion is of the very best. Globe Onions are the most popular varieties grown, and the Red Globe is planted heavier than any other variety. In the East this onion is called the Southport Red Globe and in other sections it is sold under different names, such as Ohio Red Globe, Minnesota Globe and Globe Red Wethersfield. We have bred up a variety superior to any other of the above named sorts. It is a perfect globe, skin being of a rich, glossy red, flesh fine grained, and always mild and pleasant. Like our other Globe varieties it is a very hardy and a splendid keeper, and always commands top prices on the market. You make no mistake in planting this variety. **PRICE:** Packet, 10c; oz., 25c; ¼ lb., 80c; lb., \$3.00.

Southport White Globe On account of its handsome appearance this onion always brings top prices on all markets. It is a silvery white in color, globe shape in form, flesh of delicious flavor and a fine keeper. This onion is a very heavy yielder, but a very shy seeder, and therefore the seed is always high-priced. **PRICE:** Packet, 10c; oz., 25c; ¼ lb., 80c; lb., \$3.00.

Southport Yellow Globe This is one of the same general character as the two varieties described above, except that the skin is of a rich yellow color; flesh pure white and of a mild and delicious flavor. These three varieties of globe onions we have bred up for years, so we are sure that any of our friends who entrust their orders with us will be highly pleased with the results they obtain from their crop. All of our Globe Onions ripen evenly, are wonderful keepers and on this account should be planted more extensively. **PRICE:** Packet, 10c; oz., 25c; ¼ lb., 80c; lb., \$3.00.

Australian Brown Onion Extra early, long keeping; the most valuable variety of medium size, wonderfully hard and solid, and most attractive and when once bought purcbaser will call again for these "beautiful brown onions." **PRICE:** Packet, 10c; oz., 20c; ¼ lb., 75c; lb., \$2.75.

Extra Early Red

Matures very early. Of medium size, flat shape, deep red in color; very close grained, solid and heavy; will often form bulbs in cold and mucky soils where other varieties fail. Recommended particularly for the north and northwest where the seasons are short and cool. **PRICE:** Pkt, 5c; oz., 20c; ¼ lb., 75c; lb., \$2.75.

Choice Onion Sets, Northern Grown 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 sets and seed as soon as the ground is warm and dry in the spring. **PRICE:** Our 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 a quart by measure. Order Onion Sets early.

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 Onions. One bushel weighs 32 pounds.

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. **PRICE:** Pound, 40c; pk., \$2.25; bu., \$8.00.

Choice Onion Seed

For table use large onions are much preferable to small ones and bring a better price on the market. While they do not keep quite as well as some other kinds, still they are usually of fine flavor and good till January or February.

Yellow Mammoth Prizetaker One of the largest, handsomest, finest flavored, and in every way a choice variety of yellow onion, having been grown to enormous weight of over 6 pounds. Of a clear, bright straw color, and uniform, perfect globe shape. Produces enormous crops, one report being over 1,200 bushels per acre; bring an extra price, being sold on the market as fancy onions. Keep wonderfully well. Our seed is unexcelled, ripen up hard and firm, and present the handsomest possible appearance in market, while the pure white flesh is fine grained, mild and delicate in flavor. To grow largest size, sow early in hotbeds and transplant to open ground soon as weather is favorable. **PRICE:** Packet, 10c; oz., 20c; ¼ lb., 75c; lb., \$2.75.

Copper King, or Mammoth Pompeii Have been grown to the enormous weight of 5 pounds, 6 ounces, and notwithstanding their large size retain their shape and fine quality. To obtain an idea how large this really is, weigh the largest onion you can find and compare. Copper color, flesh white, fine grained, mild. **PRICE:** Packet, 10c; oz., 20c; ¼ lb., 75c; lb., \$2.75.

Extra Early Red Onion

	By Mail.	By Express Freight.	
	Lb.	Pk.	Bu.
Red Onion Sets.....	35c	\$2.00	\$6.00
White Onion Sets.....	40c	2.25	7.00
Yellow Onion Sets.....	35c	2.00	6.00

It Pays to Plant OKRA

A fashionable vegetable, of easy growth. The pods are used when young and tender for soups and stews. Pick pods quite young and tender and slice crosswise before cooking.

CULTURE—Sow in May and June, in drill three feet apart, cover the seed with about 1 inch of soil, and thin to 12 to 18 inches apart in the rows. Use 1 ounce of seed to 100 feet of row; 8 pounds to an acre.

White Velvet Okra A standard variety for home use and local markets. We have a specially fine early strain of this variety. This strain we find to be the best of all the white varieties. **PRICE:** Packet, 5c; oz., 10c; ¼ lb., 40c; lb., \$1.00; Postpaid.

Kleckley's Favorite The pods average 6 inches in length by 1¼ inches in diameter at the bottom, carrying the thickness well throughout the length. Plant grows 2½ to 3 feet in height, smooth pods appear at leaf joints. **PRICE:** Packet, 5c; oz., 10c; ¼ lb., 40c; lb., \$1.00.

Perkins' Perfected Long Pod Large okra, esteemed by gardeners. It is a great improvement on the old green podded sorts—Large, handsome. Fine quality, very productive. 4 to 5 feet tall. **PRICE:** Packet, 5c; oz., 10c; lb., 35c; lb., \$1.00.

Parsnips **CULTURE**—Parsnips do the best in deep, rich, sandy soil, but will make good roots on any soil which is deep and mellow and moderately rich. As the seed is sometimes slow to germinate it should be sown as early as possible; cover one-half inch deep, and press the soil firmly over the seed; give frequent cultivation and thin the plants 6 inches to the foot. 1 ounce will sow 150 feet of drill; 5 pounds, 1 acre.

Our Moss Curled Parsley.

Parsley **CULTURE**—Sow in spring and fall in drills 15 inches apart. When plants have become strong thin out to 6 inches apart. Parsley often requires from 3 to 5 weeks to germinate. Soak seed in water 12 hours before planting. Plant 1 ounce seed to 200 feet of row; 3 pounds per acre.

Extra Moss Curled Our fine strain of Extra Moss Curled is the most ornamental of all varieties. It is handsome enough to have a place in your flower garden. It is the favorite sort for garnishing and to supply hotels and markets. It is planted almost exclusively by market gardeners for that purpose. **PRICE:** Packet, 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Double Curled Plants of dwarf, compact growth, and the young leaves have the edges heavily crimped, giving it a general appearance of coarse moss. Used by market gardeners. **PRICE:** Packet, 5c; oz., 15c; ¼ lb., 30c; lb., \$1.00.

Plain Leaved Is very hardy, a strong grower, and excellent for seasoning, for which purpose it is grown almost exclusively. **PRICE:** Packet, 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Improved or Table Guernsey.

Improved Table Guernsey A greatly improved and wonderfully fine strain of the Guernsey Hollow Crown Parsnip. The roots do not grow as long as the Hollow Crown, but are of greater diameter and more easily gathered. Very heavy cropper; roots are smooth with a deep, hollow crown and a small top. Flesh fine grained; sweet and of excellent quality; cooks evenly, center being as fine, soft, even quality as outside portions. **PRICE:** Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 90c.

Improved Half Long We consider this the best parsnip for general planting, market gardener or amateur. The root is smooth, and the flesh fine grained and of excellent flavor. It is a heavy cropper. Being larger in diameter and shorter than the Long Smooth, it is harvested with less labor. Excellent for stock as well as for the table. **PRICE:** Packet, 10c; oz., 15c; ¼ lb., 30c; lb., 90c.

Sugar or Sweet Pumpkin The pumpkin from which the celebrated pumpkin pie is made; also first-class for baking. It is small, being from 10 to 12 inches in diameter, but its quality is of the finest. Most prolific and is not excelled as a table variety. **PRICE:** Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 90c. (See next page.)

Until recently it was thought that peanuts could be raised only in the South, but they are now raised as far north as Canada. In the last few years Peanuts have become very popular for dry land farming. They are classed with Dwarf Milo and Feterita in their ability to withstand dry weather, and made good returns in the dry summer of 1913.

The tops of the plant make good hay. The yield even in dry seasons is from one-half to three-quarters of a ton of hay and from 25 to 60 bushels of nuts per acre. The whole peanut plant makes nice feed for rapidly fattening cattle and hogs, especially when combined with grain. A common method of harvesting is to let the hogs gather the nuts.

Peanuts do best in light sandy loam. They should be planted in rows from 23 to 30 inches apart and from 9 to 16 inches apart in the row. They need not be shelled but should be soaked in warm water for a day or so and then planted at once in warm soil. Planting should be cultivated and kept clean until they begin to form pods. After that they should be left alone. It takes from one peck to a peck and a half shelled nuts and from a bushel to a bushel and a half in the shell to plant an acre.

Mammoth Early Virginia This very desirable variety is as early as of the best quality. Boys, here is a chance for you. Think of peanuts in your own garden and have plenty of them to eat. They produce twenty-five to sixty bushels per acre and are as easily cultivated as corn. **PRICE:** Packet, 10c; pt., 25c; qt., 40c; 2 qts., 75c; postpaid. Write for special price in large quantities.

Spanish Peanut A Splendid Early Variety. Pods small, but remarkably solid and well filled with nuts of very fine quality. The yield per acre is very large. Can be cultivated with the plow. Because of their early habit and easy cultivation it is the best variety to grow for fattening hogs. **PRICE:** Packet, 5c; pt., 25c; qt., 40c; Postpaid. If wanted in quantities write for prices.

Pumpkin

ONE OUNCE WILL PLANT TWENTY-FIVE HILLS, FOUR POUNDS WILL PLANT ONE ACRE.

"Whale"

King of Mammoths.

King of the Mammoths Wonderfully grand and colossal variety, astonishing everyone by its mammoth size and heavy weight. Think of a single Pumpkin weighing 469 pounds! Many of our customers saw this specimen on exhibition at the World's Fair. King of Mammoths is always a prize winner at fairs and exhibitions. Notwithstanding its enormous size, it is one of the best pie and table varieties grown. A splendid keeper, and exceptionally valuable for feeding purposes. PRICE: Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Large Cheese This is a very popular pumpkin for pies and is quite commonly known as "Sweet Pumpkin." In size they average about as large as the Connecticut Field but are flat shaped, with creamy buff skin and thick golden flesh. It is one of the best of the pie pumpkin and can be grown in the corn like the common cow pumpkin. PRICE: Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Pepper

(One ounce will produce about 1,800 plants.)

Sow seeds in hotbeds early in spring; transplant to open ground when the weather is favorable, in warm mellow soil, in rows 18 inches apart. Seeds germinate slowly and require considerable heat.

Coral Gem Bouquet This new red hot pepper is the finest of the smallest sized varieties. Excellent for pepper sauce. Nice to chop up for mixing picilli. PRICE: Packets, 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.50.

Ruby King Very large in size, $4\frac{1}{2}$ to 6 inches long by $3\frac{1}{2}$ to 4 inches thick. When ripe they are of beautiful bright ruby red color and are always remarkably mild and pleasant to the taste. Produces large, handsome fruit and is splendid for stuffed peppers or mangoes. PRICE: Packet, 10c; oz., 40c; $\frac{1}{4}$ lb., \$1.25; lb., \$4.00.

Chinese Giant Most gigantic of all Giant Peppers. A fine mild red pepper of enormous size, magnificent appearance and brilliant, glossy scarlet color. The flesh is mild and unusually thick. Makes an excellent salad sliced and served like tomatoes. PRICE: Packet, 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50; lb., \$5.00.

Kaleidoscope A very ornamental new sort. The small fruit changes from cream color to canary, deepening to orange then turns into pink, until it becomes a deep, shining scarlet. PRICE: Packet, 10c; oz., 50c; $\frac{1}{4}$ lb., \$1.50; lb., \$5.00.

Sweet Mountain, or Mammoth This pepper is in shape similar to Large Bell, but fruits are much larger and not nearly as pungent. A splendid sort for making stuffed pickle. Has been a standard large pepper for many years. PRICE: Packet, 5c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

Red Chili Small, long fruit, but very hot. Used for pepper sauce. PRICE: Packet, 5c; oz., 30c; $\frac{1}{4}$ lb., 80c; lb., \$3.00.

Red Cayenne Pods long and slim, of medium size. Pungent. Used for pepper sauce. PRICE: Packet, 5c; oz., 30c; $\frac{1}{4}$ lb., 90c; lb., \$3.25.

Yankee Pie The noted New England Pie or Small Sugar Pumpkin. Same shape and color as the Connecticut Field but is smaller, very sweet, fine grained and one of the best varieties for table use. It pleases everyone for making pies. Early. PRICE: Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Japanese Pie A crook neck variety. Early. Flesh of fine quality. Keeps well. PRICE: Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Mammoth Tours Also called "Mammoth" where it is largely grown, both for feeding cattle and table use. Grown to an immense size, sometimes 3 feet in length, and to a weight of 100 to 200 pounds. Flesh of salmon color. Seed of a peculiar shape. PRICE: Ounce, 10c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

From 20 seeds Mammoth Tours Pumpkin I grew 40 pumpkins that weighed 4,000 pounds, and innumerable smaller ones.

JOHN C. JONES, Brown County, Texas.

A Prize Winning Pumpkin

Mammoth Prizetaker Do you want to grow the biggest pumpkin in your county? If so, MAMMOTH PRIZE TAKER is the variety to do it with. It is nothing to grow them weighing 150 to 200 pounds on unfertilized ground, and has a record to have grown one to the enormous weight of 339 pounds under fertilization. Under good cultivation it's a monster. In quality it is good, considering the size. Flesh is a bright golden yellow and fine grained. A good yielder and keeps well. PRICE: Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Connecticut Field Is the common field or cow pumpkin. If you have any live stock plant some of these. PRICE: Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 80c; 5 lbs., \$3.50.

Big Tom A strain of Yankee or Connecticut Field Pumpkin which has been selected for many years to secure the most uniform type. Not only are the pumpkins larger and smoother but the yield is nearly double that of the old variety. We recommend it to our customers as the very best type of cornfield pumpkin. PRICE: Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

All Kinds 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. For 10c you obtain seed of every variety in list. PRICE: Packet, 10c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Large Bell or Bull Nose Pepper.

Large Bell, or Bull Nose Early standard sort. King and not quite so large. Is the favorite for drying for winter use. PRICE: Packet, 10c; oz., 40c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

Mixed Peppers A choice mixture of all the above and several other fancy varieties. Fine for exhibition. PRICE: Packet, 10c; oz., 30c; $\frac{1}{4}$ lb., \$1.10; lb., \$3.00.

Choice Garden Peas

BEST VARIETIES

New Wonder.

Two Pounds Will Plant 100 Feet of Row—One and One-half to Two Bushels For an Acre.

CULTURE—Peas of extra early, smooth class are the very first thing to be planted in the spring. The wrinkled sorts follow a little later, as they are not quite so hardy. Tall late varieties need brush or other support. By selecting sorts that do not grow much over four feet high the necessity of providing brush may be avoided. Judicious selection of varieties for succession will give a full supply of choice green peas during the entire season. Open furrows three or four inches deep and three feet apart; scatter the peas into them and cover with hoe. Cultivate like corn or beans. Garden peas, however, require good, strong and fertile land.

Extra Early Smooth Varieties

Wrinkled Peas Weigh 56 pounds to the bushel; Smooth Varieties, 60 Pounds.

New Wonder A round seeded hard shell pea that can be sown when frost is barely out of the ground; before it, is safe to sow wrinkled sorts. This, with its quickness of growth and maturity, renders it the earliest pea on record. Is unequalled for general excellence, grows 2½ feet high and pods of good size; of splendid flavor. Is a very heavy yielder and with its extreme earliness, lies its great value to gardeners. It is one of the best. **PRICE:** Packet, 5c; ¼ lb., 15c; lb., 40c; Postpaid.

Iowa Challenge Extra early variety of superior merit which is a favorite with market gardeners. We can in confidence say that after a trial of nearly all extra early varieties we have not found one possessing more merit, hence its name. For the market gardener it has no superior. Is not only extra early and prolific, but of good flavor. All good qualities of Extra Early are most nearly brought to perfection in the Challenge. Height 18 inches. **PRICE:** Packet, 5c; ¼ lb., 15c; lb., 40c; Postpaid.

First and Best **EXTRA EARLY**—One of the earliest fall varieties, with smooth, round peas, which ripen almost at one time. Grows two to two and one-half feet high, seed yellowish white; pods straight, short and well filled. Quality best of smooth seeded early varieties. **PRICE:** Packet, 5c; ¼ lb., 15c; lb., 40c; Postpaid.

Earliest of All A smooth pea well suited for extra early planting; vine 2 feet high; pods small; will not rot in cold, wet ground; popular with canners. **PRICE:** Packet, 5c; ¼ lb., 15c; lb., 40c; Postpaid.

Early Dwarf Wrinkled Varieties

Alaska Height two feet, pods rather small, dark green color, well filled, the earliest pea known, being earlier than the Rural New Yorker, and 70 per cent. of the pods can be gathered at the first picking. **PRICE:** Packet, 5c; ¼ lb., 15c; lb., 40c; Postpaid.

Little Marvel A strong vine about 15 inches high, bearing tremendous crops of fair size pods, frequently borne in pairs. Pods 2½ to 3 inches long, containing six to seven large, deep green peas. As early as American Wonder more productive, and will be preferred by gardeners generally because of extra quality. **PRICE:** Packet, 5c; ¼ lb., 15c; lb., 40c; Postpaid.

Premium Gem This has been for many years the standard dwarf wrinkled peas for the family, and are also popular with market gardeners. It only grows 12 to 15 inches high and requires no support. It is an improvement on the McLean's Little Gem, being much more prolific than that variety. Pods large, dark green, and quality of the peas is superior to most sorts. **PRICE:** Packet, 5c; ¼ lb., 15c; lb., 40c; Postpaid.

Gradus or Prosperity **WITHOUT A RIVAL FOR TABLE QUALITY.** An Extra Early Wrinkled Pea, hardy, early and very prolific. This remarkable Pea has been on the market 10 years, and has grown in favor until it is the most widely known variety in cultivation. The secret is that it produces a **TELEPHONE POD** as early as Alaska. Then, too, its quality is of the highest order—fully equal to the finest late marrow grown. The vine is of vigorous growth, about 30 inches in height. The pods are large and fine and most luscious quality. For the home garden it is perfectly adapted. It is the most profitable on account of the earliness combined with size of pod. **PRICE:** Packet, 5c; ¼ lb., 15c; lb., 40c; Postpaid.

Nott's Excelsior The sweetest and most prolific of all the early Dwarf Peas; outyields Premium Gem or American Wonder. The best sort for the market or home garden. The vines are vigorous and very prolific, while the pods are closely packed with large peas of very fine flavor. Height, 1 foot. **PRICE:** Packet, 5c; ¼ lb., 15c; lb., 40c; Postpaid.

McLean's Little Gem A dwarf, prolific, green wrinkled marrow; habit similar to the Tom Thumb. It has all the sugary flavor of the late wrinkled peas. Height, 1 foot. **PRICE:** Pkt., 5c; ¼ lb., 15c; lb., 40c; postpaid.

Gradus, or Prosperity.

WRITE FOR QUANTITY PRICES ON PEAS.

Choice Garden Peas

CONTINUED

American Wonder Popular extra early variety for family garden. Cannot be planted quite as early as smooth sorts; will not stand as much cold, wet weather but is far superior to them in flavor and table qualities. Dwarf, robust habit, growing about 12 inches high; produces a profusion of good-sized, well-filled pods of the finest flavored peas. **PRICE:** Packet, 5c; $\frac{1}{4}$ lb., 15c; lb., 40c; Postpaid.

Second Early and Main Crop Varieties

Dwarf White Marrow An improvement on the old Large White Marrowfat. Fully as productive, but does not grow so tall and rank. Used almost exclusively for late midsummer planting by market gardeners and is very productive. Grows 3 to 4 feet and is best if supported, though support is not usually given. **PRICE:** Packet, 5c; $\frac{1}{4}$ lb., 15c; lb., 40c; Postpaid.

Champion of England It grows 4 to 5

feet high and requires support, but fine quality and large crop production more than repays any extra labor required. A strong, vigorous grower and continues to bear for a long time. **PRICE:** Packet, 5c; $\frac{1}{4}$ lb., 15c; lb., 40c; Postpaid.

Telephone Immensely productive; finest quality; an excellent sugary flavor; vines very strong growing, about 4 feet high, and should be supported. Pods large, with 6 or 7 large, delicious peas. **PRICE:** Packet, 5c; $\frac{1}{4}$ lb., 15c; lb., 40c; Postpaid.

Everbearing Fine for main crop. Grows about 2 feet high, strong and vigorous, branches in a peculiar manner and needs no support. Continues to grow and bear all season if picked. Pods and peas of large size and fine quality. **PRICE:** Packet, 5c; $\frac{1}{4}$ lb., 15c; lb., 40c; Postpaid.

Improved Stragem The most popular late variety for market or family use. It is preferred because of the immense size of pods and peas and the exceptional sweetness and tenderness of the peas when ready to use. Does not grow very tall, being really a half dwarf sort two to three feet high, and does not require support, though it will repay for the labor of training up with greater yield and longer bearing season. It is a vigorous grower of branching habit, and under favorable conditions an enormous cropper. Pods are large, long, and filled with seven to nine large peas of superior quality. **PRICE:** Packet, 5c; $\frac{1}{4}$ lb., 15c; lb., 40c; Postpaid.

Rhubarb, or Pie Plant **IDEAL MAMMOTH**—This new variety, which is decidedly the finest and best of all, originated with Dr. Kennicott, of Illinois. The stalks are much larger than the Victoria or any other sort and are also produced in much greater abundance. Like all bigbly improved sorts it seeds sparingly and it comes more nearly true to name if grown from seed than most other varieties. **PRICE:** Packet, 10c; oz., 20c; $\frac{1}{4}$ lb., 60c.

VICTORIA—For many years the standard variety of rhubarb. Stalks are not so large as Ideal Mammoth, but are preferred by many on account of their more piquant and richer flavor. **PRICE:** Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 50c.

Victoria Rhubarb.

Improved Stragem.

Rhubarb Roots Everyone realizes the value of rhubarb or pie plant in the home garden. The best way to get a start is to purchase a few roots, as you can save one year's time in this way. The roots we offer are not seedlings but large divided plants. Plant in spring or fall, setting plants 3 feet apart each way.

VICTORIA—The standard for general use. **PRICE:** Each, 15c; 5 for 50c; Postpaid. By express, not prepaid, per dozen, \$1.00.

IDEAL MAMMOTH—The largest and best variety. See description in vegetable seed department. Strong roots, 20c each; 5 for 75c; dozen, \$1.50, Postpaid. By express, not prepaid, per dozen, \$1.25.

Spinach, Long Standing

CULTURE FOR EARLY

spring use, sow seed in August or September, in rich soil. Upon approach of cold weather, cover the plants with 3 inches of straw or salt hay. In the spring when dry, remove the litter and plants will be ready for use in short time. This is a wholesome vegetable throughout the entire season. It is very hardy. Seed sown in September will produce small plants, which, with a slight covering, will be available for use very early in spring. The plant is small, with very rich lustrous green leaves. These are short, broad, very thick, and of so great substance, that it loses bulk in cooking less than any other sorts. **PRICE:** Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 75c.

AMERICAN WONDER

WRITE FOR
QUANTITY
PRICES ON
PEAS.

Dwarf Champion

This is a great improvement on the Champion of England which has been one of the sweetest, best and most popular varieties for the last thirty years. The old variety is very tall (6 ft.), while this new sort grows only 2½ feet and still vines are vigorous with a great profusion of very large pods filled with large sized peas of superior quality and very sweet. Medium late and suited to main crop. **PRICE:** Packet, 5c; $\frac{1}{4}$ lb., 15c; lb., 40c; Postpaid.

Long Standing Spinach

Radishes--All the Best Varieties

One ounce will sow 100 feet of drill;
8 pounds an acre.

20-Day White Radish First and best of all. If you want to grow the **VERY EARLIEST** and **BEST** of all this is what you want to do it with. It certainly **IS A GEM** and is valuable for growing in a hotbed or to sow early in the open ground. It will supply your table with nice white crisp radishes ten days to two weeks before any of your neighbors have a taste. It is twice as long as your finger, as white as snow and

as crisp and brittle as an icicle and will produce fine radishes fit to pull in twenty days from the time you plant the seed. We are pleased beyond expression to have obtained the entire stock of seed of this new introduction, for our trade and customers. The supply, however, is limited this year, but a small quantity of seed will grow a good supply for your table and a world of seed for another year. By all means include some of this seed in your garden seed order. **PRICE:** Packet, 10c; oz., 20c; ¼ lb., 60c; lb., \$2.00.

A Prize Collection, Only **25c**

1 packet Rockford "GEM OF EDEN" Cantaloupe.....	10c
1 packet "NEW NATIONAL" Watermelon.....	10c
1 packet "20-DAY WHITE RADISH".....	10c
1 packet "MAGI QUEEN" Tomato.....	10c

All for twenty-five cents, postpaid.

40c

Another 20-Day Radish

If you want to grow the earliest **Scarlet Turnip Radish**, this is what you want. It certainly is a gem and is especially adapted for growing in hotbeds or to sow early in the open ground. It is crisp and tender, and will produce radishes fit to pull 20 days after sowing the seed. We are pleased to offer our customers such a splendid early radish and know it will be highly prized. **PRICE:** Packet, 5c; oz., 20c; ¼ lb., 50c; lb., \$1.75.

French Breakfast Is distinct from any radish in cultivation. This pretty radish in color is bright red tipped with white. It is oblong in shape, and in quality is crisp and tender. It is a quick grower, and is an exceedingly popular variety. **PRICE:** Packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Earliest

Scarlet Radish

French Breakfast Radish
YOU CANNOT BUY BETTER RADISH SEED THAN OURS.

Improved Chartier

Improved Chartier An American variety, which is one of the best long radishes for general planting outdoors. Roots in good condition when one-half inch thick and continue hard and crisp. Red above and shading to clear white at the tip, as shown in the illustration. Large, but both brittle and tender. Widely popular. This radish makes a fine appearance on the market stall. **PRICE:** Packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Mixed Radish Our mixture of about 2 dozen kinds contains all shades and shapes; red, white, pink, variegated; round, half-long, and long, in great variety. It is all the go for small gardeners, where space is limited and you want to make garden and be done with it. One sowing does for the whole season, as they come 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. **PRICE:** Packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Radishes-- Continued

Striped Triumph A beautiful new variety. It is of the shape shown in our illustration with white skin striped white scarlet, being decidedly ornamental when placed on the table. It is very early and has a very small top, thus adapting it to cultivation in hotbeds. The flesh is white, crisp, tender and as good flavor as any radish grown. They are always fine. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.75.

California Mammoth White Winter Radish.

The merits of Winter Radishes are little appreciated, because few people have knowledge of their worth. These grow to large size and keep well for winter use. Sow seed in the middle of June.

California Mammoth White Winter Radish Pure white, about one foot long and two or three inches through; flesh tender and crisp, keeping well through the winter. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.75.

China Rose Bright rose color, flesh firm and piquant. One of the best for winter use. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 50c; lb., \$1.75.

Horse Radish Roots or Sets Horseradish is always in demand in winter and spring. The culture is by sets or roots cutting, as it seldom seeds. These sets are planted in rows or furrows 2 to 3 feet apart and 15 to 18 inches apart in the rows. The sets should be placed in a

Striped Triumph Radish

perpendicular position, with crown 3 to 6 inches below surface. Horseradish delights in a deep, rich soil. It makes large top growth, giving weeds small chance. The **COMMON VARIETY**—very choice—we offer at 25c per dozen; 50 for \$1.00; Postpaid.

Squashes The Acknowledged Favorite Standard Varieties

One ounce early varieties will plant about forty hills; one ounce

late varieties will plant about twenty hills; 3 to 4 pounds per acre. Plant about the middle of spring in hills; the early sorts four to six feet apart, the late varieties eight to twelve. Thin to three plants in the hill. The soil cannot be too rich. Use Slug Shot to kill the bugs.

Early White Bush Summer Squash

Scalloped—This is the white Patty Pan. The plants are of true bush growth, producing fruit ready for use very early in the summer. **PRICE:** Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00; Postpaid.

Burpee's Fordhook

"Bush growth." Plants can be grown closely together. Fordhook is a week later than the Early White Bush; is much sweeter and better flavored. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25; Postpaid.

New GOLDEN HUBBARD SQUASH

PRODUCTIVE
EARLY
BEAUTIFUL
GOOD

Golden Bush An improvement on the old Yellow Bush Scallop or Patty Pan. The earliest of all and quite a favorite with all who like summer squash. **PRICE:** Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c.

Early Bush Crookneck Splendid, early, productive, fine quality. With all new varieties recently brought out, many claim there is no summer squash superior to this. **PRICE:** Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; lb., 90c.

Golden Hubbard Also called Red Hubbard. The One Variety of Squash that is justly popular wherever grown. This is a counterpart of the old Green Hubbard, except in color, which is a bright, deep orange yellow; much richer in color than Hubbard, fine grained, cooks very dry, and is of excellent flavor. Its keeping qualities are fully equal to, while in productiveness it far excels the green variety. This is a squash that every market gardener should plant, for it is a "seller." **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.00.

Table Queen Squash

Excellent new variety. Seeds are small and are to be planted like the early varieties as to distance. The vines are vigorous and are very productive. They are just the right size, averaging about 6 to 8 inches long, and 4 to 6 inches in diameter. Color dark green, with sometime a spot of red at pointed end. The shell is hard and

smooth and is ridged. Just wash it clean, cut in half, take out the seeds, bake twenty minutes and you will have the most delicious squash you ever tasted. Splendid for pies because of its sweetness and dainty flavor. Ripens in the fall and keeps as long as Hubbard. A novelty introduced in full confidence, as it has already established itself a favorite. **PRICE:** Packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Blue Hubbard, or Marblehead Splendid winter variety. Shell light blue; flesh similar to the Hubbard in quality. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 40c; lb., \$1.25.

Warty Hubbard A new strain of the Hubbard, the wartiness indicates a very hard shell, which is one of the very best features of a long-keeping squash. **PRICE:** Packet, 5c; oz., 15c; $\frac{1}{4}$ lb., 35c; lb., \$1.25.

True Hubbard This sort has stood the test of all rivals and is the most popular winter squash grown; hard, green shell, flesh bright orange yellow, fine grained, very dry, sweet and rich flavor; keep in perfect condition throughout the winter. Our stock is grown on our farms and is selected for thick flesh and solidity. It has been given our special care for a period of years and is of the highest type. **PRICE:** Packet, 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Turnips

Early White Flat Dutch—Early Red or Purple Top

Early White Flat Dutch One of the most popular early varieties for either spring or fall planting. Is flat, as shown in the illustration. Flesh and skin pure white; fine grained and sweet. **PRICE:** Packet, 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Early Red or Purple Top This is another variety of early flat turnip. Known in many sections as the Purple Flat Dutch. It's a quick grower with very fine-grained, sweet-flavored flesh. Very popular variety. **PRICE:** Packet, 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Extra Early Milan The earliest of all turnips. A flat, purple top variety, resembling the Early Red or Purple Top very closely but is two weeks earlier. Perfect in shape and color, sweet and fine grained. **PRICE:** Packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00.

Purple or Red Top Globe Our most popular variety for general planting. Is medium early, globe shaped, handsome appearance and a heavy cropper. You cannot plant too many of them either for home use or market. **PRICE:** Packet, 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Early Snowball Extra early variety. Perfectly round, pure white, solid, sweet, with short top. **PRICE:** Packet, 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Golden Ball A splendid yellow variety; round, color deep orange. This is the finest of all the yellow varieties for table use. **PRICE:** Packet, 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Rutabaga or Swede Turnip

An eminent authority on agriculture never made a more truthful statement than when he said: "As compared with hay at \$10 to \$15 per ton, I prefer Rutabagas at \$5 per ton." An average yield of 20 to 30 tons to the acre is common.

If sown the last of July or the first of August, they make an excellent pasture during the fall months, and the turnip will furnish a rich food all winter. All kinds of stock relish and fatten upon them, when fed in combination with hay.

CULTURE—The ground should be enriched with well rotted manure and the seed sown in drills two feet apart and thinned out to six or eight inches in rows. When the roots have fully matured and before severe weather sets in, pull out the tops and store them in a root cellar or pit.

Improved American Rutabaga A Prize Winner Everywhere. Our special strain of Improved American is the best and heaviest cropper of all rutabagas. It is of fine form, with a rich purple top and yellow flesh, is tender and sweet and free from stringy, hard flesh. It has a small top, fine roots, and is the surest and heaviest cropper. **PRICE:** Packet, 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Mammoth White Russian One of the best in cultivation. One of the greatest sorts. Grows very large with small top, short neck. Produces heavy per acre. Keeps sound till late spring. The best Rutabaga in cultivation. **PRICE:** Packet, 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

New Monarch, or Elephant This magnificent Rutabaga is unquestionably the most profitable of all Swede Turnips, as well as the hardiest, heaviest, best and most productive, a yield of 1,000 bushels per acre and over being of frequent occurrence. Yellow color, always sweet, tender, juicy and nutritious. **PRICE:** Packet, 10c; oz., 15c; $\frac{1}{4}$ lb., 45c; lb., \$1.50.

Purple or Red Top Globe Turnip.

Improved American Rutabaga.

Tomatoes

Famous Magi Queen Tomato
Earliest of All

HAS EVERY OTHER TOMATO BACKED OFF THE TRACK.

The Earliest and Best Tomato Grown

Combines the earliness of Earliana with the beauty and flavor of Stone and the solidity of Ponderosa.

We first introduced this **GRANDEST OF ALL TOMATO** in 1912, under the head of "NAMELESS TOMATO" in which we said the first early tomato introduced by us that will displace all other varieties for earliness, size, color, shape and solidity; equal alike for either home or market use and canning purposes. This being our (the introducer's) first season, we want every one of our customers to try out at least one packet. This has since and is now verified by more than fifty thousand gardeners, truck growers and housewives who have tried and tested it. Tested in all sections of the country from New Jersey to Oregon, from Minnesota to Texas; in fact, every section of the country where tomatoes are grown, and have proven that it is **THE VERY BEST TOMATO GROWN**. The fruits ripen up evenly and set more freely than Earliana, also they command a higher price on the market on account of their color, size and shape. In the northwest they are sure to set their fruit, are abundant bearers and have proven themselves practically free from the terrible blight which affects other varieties in that section.

In the south the "Magi Queen" has proven a winner. It ripens for first early market, keeps well, is a good shipper, but best of all, withstands the hot, dry winds, is free from the rot and blight which southern gardeners are always fighting.

SIZED UP FROM EVERY STANDPOINT, IT IS THE BEST ALL PURPOSE TOMATO I HAVE EVER SEEN. The **MAGI QUEEN TOMATO**: Grand and glorious tomato; the largest, handsomest, finest flavored, most superior early tomato ever offered. It's a healthy, thrifty, rapid growing tomato. The plants are compact, with stout, close joined branches, which set fruit very freely. The fruits are good size and very beautiful; brilliant scarlet color, smooth, sweet and juicy, yet the flesh is solid, almost "beefy," contains but few seeds and with very small core. It is everbearing from two months after it is transplanted until frost, and has proven the best and sweetest of all for slicing and for all purposes. **PRICE: Packet, 10c; oz., 50c; ¼ lb., \$1.25; ½ lb., \$2.25; lb., \$4.00.**

Sparks' Earliana sale as Sparks' Earliana. Extremely early, remarkable for large size, handsome shape, and beautiful bright red color. Its solidity and fine qualities fully equal the best late sorts. One of the most profitable crops for the market gardener and especially desirable in the home garden. As far as I am personally concerned I am satisfied **MAGI QUEEN** is still the earliest of all tomatoes. But at the same time I am willing to admit that Spark's Earliana is also an excellent variety, and that it has given **MAGI QUEEN** a harder tussle for supremacy than any early variety. **PRICE: Packet, 10c; oz., 30c; ¼ lb., 85c; lb., \$3.00.**

Small Fruited Tomatoes

Dwarf Champion Tomato.

Dwarf Champion Dwarf and compact in habit; sold by some seedsmen as the Tree Tomato. Stands up well, even when loaded with fruit, having a stiff, bushy stem; can be planted close together; very desirable in small gardens; early. It is always smooth and attractive; the skin is tough and flesh solid, but has no hard core and is of good flavor. **PRICE: Packet, 5c; oz., 30c; ¼ lb., 90c; lb., \$3.00.**

Mixed Tomatoes For the advantage of some of our customers who would like to try all kinds, we have prepared this mixture of the varieties named and several others which we think will please all. **PRICE: Large packet, 10c; oz., 30c; ¼ lb., 85c.**

Magi Queen Tomato.

Strawberry, or Husk Tomato

Makes Fine Preserves. This useful fruit, which is also called Strawberry and Ground Cherry Tomato, is greatly valued for use as a preserve; it also makes delicious pies either when ripe or dried with sugar. When ripe the fruits are half an inch in diameter and of very sweet and agreeable flavor. The vines cover the ground and yield enormously of the fruit, which is enclosed in a husk or fruit calyx. There are two varieties of the Husk Tomato, the Golden Husk and the Purple Husk. We consider the Golden Husk by far the better of the two and unless otherwise directed will always send Golden Husk on orders received for Strawberry, Ground Cherry or Husk Tomato. **PRICE: Packet, 10c; oz., 30c; ¼ lb., \$1.00.**

Golden Nugget Fruits are beautiful golden yellow, about as large as a hulled walnut. Flavor exceptionally fine, and a most desirable variety for eating from the hand or as a dessert fruit. We have grown them both on our farm and at our trial grounds, and were more than pleased. Plants were loaded down with beautiful, rich, golden yellow fruits of excellent flavor. Try them. They are extra fine. **PRICE: Packet, 10c; oz., 75c.**

Mammoth Beauty.

Tomatoes

Continued

One ounce of seed produces about 2,000 plants; 2 ounces enough for an acre. For early crop sow in hotheds in January or February. For late crop in open beds in May. Tomatoes as a field crop yield 300 to 500 bushels per acre. The seed may be sown in shallow boxes and placed in a window when one does not wish to have the trouble of making a hotbed. Transplant in the open ground when all danger of frost is past, setting the plants four feet apart each way.

Mammoth Beauty

The Grandest Tomato
on Earth

Mammoth Beauty **THE BEST MAIN CROP TOMATO.** Smooth, uniform, prolific, a long keeper and of the finest quality. Fruit is a glossy crimson, large size and so perfect and uniform that they look as though each one were molded with a stamp. On account of its perfect shape and great beauty it is unsurpassed for market. Its quality is excellent, flesh solid, beefy and with very few seeds. Ripens up after the first earlies and continues to hear until frost. A splendid keeper; ripe fruit fresh from the vine have been kept in perfect condition from 3 to 4 weeks during the warm summer weather. Planted together side by side with our new tomato, **MAGI QUEEN**, you will have two of the most profitable tomatoes to be grown and can cater to the most critical of markets, thereby gaining highest prices. **PRICE:** Packet, 10c; 3 pks., 25c; oz., 40c; $\frac{1}{4}$ lb., 90c; lb., \$3.00.

Henderson's Red Ponderosa From its first appearance twelve years ago it gripped and held the admiration of all who grew it. This has made it possible not only to maintain the high standard of quality which it has always occupied, but by careful development to raise it to a higher standard of perfection than ever.

Unquestionably the one great requisite in a vegetable for private use is quality—first and always **QUALITY**. With a Tomato this means primarily good flavor, free from acidity; then a fairly tender skin, solid, meaty flesh, few seeds, and very little juicy pulp. These ideals are perfectly exemplified in Ponderosa; Ponderosa in size or delicious, meaty flavor is not only the largest but also the heaviest tomato grown. The color is a glowing crimson; shape quite regular considering its size, and it is considered by thousands of people the best table variety in existence for slicing, having but few seeds. The fruit ripens early and bears well until very late. A good tomato for home use. We offer the genuine headquarters stock. **PRICE:** Packet, 10c; oz., 25c; $\frac{1}{4}$ lb., \$1.00; lb., \$3.25.

The New Stone, Genuine Strain This is one of the most popular main crop varieties in cultivation and there is probably more seed sold of this sort than all others combined, under Ideal Tomato Conditions. We have brought this tomato to a very high state of perfection, so that our seed is not surpassed in quality by any offered. This variety has obtained immense popularity with market gardeners, growers, canners and home growers everywhere. Its solidity and carrying qualities are remarkable. Its color is a desirable red. Its shape perfectly smooth, and thicker from stem to blossom end than most varieties, making it very handsome and salable. Nobody finds any fault with this variety, but all speak in the highest terms of its beautiful color, its wonderful yielding qualities, its unequalled firmness, or some other of its good points. **PRICE:** By mail postpaid: Packet, 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb., \$2.00. Not prepaid: $\frac{1}{4}$ lb., 55c; lb., \$2.00.

Livingston's Beauty One of the best ever introduced. Its size, beauty, shape, color, flavor, durability and productiveness makes it desirable to growers. **PRICE:** Packet, 5c; oz., 30c; $\frac{1}{4}$ lb., 85c; lb., \$2.75.

Golden Queen The superior flavor of the yellow varieties is bringing them into favor as table fruit, and those who think of the old yellow sorts will be surprised at this smooth, beautiful fruit, as smooth as the best of red varieties, and of a fine and distinct flavor. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Perfection Solid flesh, always smooth, and of blood-red color. This is a general favorite, equally desirable for the home garden, for shipping and for canning. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.75.

Matchless Well worthy of its name, for in beauty of color and symmetry of form it is without a peer. The vines are of strong, vigorous growth, well set with fruit; are free from core, of the finest flavor, of a very rich red color, of largest size. Fruit solid

New Stone.

a fine quality, and keeps well. **PRICE:** Packet, 5c; oz., 25c; $\frac{1}{4}$ lb., 75c; lb., \$2.50.

Tomato Seed If you plant our Tomato Seed it is easy to grow good tomatoes. Our tomato seed is saved exclusively from crops grown for seed purposes and only from the choicest tomatoes. We cannot compete in price with seed dealers who buy and sell canning factory seed. Our seeds stand the test of time. It's exactly the seed you want for your use, no matter whether you garden for market or home use.

Choice Northern Grown Seed Potatoes

Our Seed Potatoes Are grown exclusively in the Red River Valley of North Dakota and Minnesota. "Red River" stock always commands a premium over potatoes produced elsewhere. No seed potatoes can be compared with those produced in the North, either for vigor and freedom from disease, or for producing and long keeping qualities. The seed potatoes we send out are seed potatoes in every sense the word implies. They are not only the best we can supply, but the best to be had from any source at any price. To that end they are screened and hand sorted, selected stock such as anyone will be proud to plant. We personally superintend the cultivation and harvesting and loading of cars. Our seed is clean, healthy and free from scab; and in order that the produce may be equally so, we urge our customers to treat the seed they plant with formaldehyde, as the soil may be infected.

Potato Culture Use 8 to 10 bushels of seed potatoes per acre. Cut to two eyes. Plant in rows 3 feet apart, and drop 10 to 12 inches apart in row. Cultivate constantly and thoroughly. Ridging with loose soil is often practiced, but

it is not always necessary. Store in frost-proof cellar or pit in winter. Potatoes are planted both early and late.

Date of Shipment We ship our seed potatoes in the spring as soon as danger of freezing is over, so they will arrive in plenty of time for planting. All orders for potatoes are acknowledged as soon as received, and forwarded the first day that we feel it safe to start them. When shipment is ordered otherwise, shipment is made at purchaser's risk and we assume no responsibility on account of freezing. We do not charge for hags, boxes or barrels. All potatoes are carefully packed and delivered to the railway company in good order and condition, then our responsibility ceases.

POUND PRICES: All varieties, 25c per lb.; 3 lbs., 60c, postpaid, except when otherwise noted.

Seed Potatoes

PRICES on potatoes frequently change as the market advances or declines. If you want a quantity, write us for special quotation. These prices subject to change without notice.

Early Ohio Potatoes

Fancy Northern Grown Stock.

We consider these to be the earliest, purest and altogether the handsomest stock of Early Ohio Potatoes to be found anywhere. On these points we challenge comparison with stock from any other source. We do not admit that its equal exists among Early Ohio Potatoes. They are grown under conditions that make them cost more than common stock. They are selected with the utmost care and the result is such as to delight everyone who knows and appreciates a good potato.

The Early Ohio Potato is so well and generally known as to require no extended description. We believe it to be more popular than any other variety, which fact is evidenced by the very large demand for it. Our sales on this sort are many hundreds of bushels in excess of the quantity sold of any other one kind. They can be depended upon so uniformly to give a good yield under most all conditions and all soils and produce a tuber of an ideal size for early market use.

Extra Early Ohio (grown in Red River Valley)

Notwithstanding its earliness, this potato keeps well. Our stock on the spring is as sound as a dollar.

The accompanying picture of Early Ohio Potatoes in the illustration represents the stock of this splendid variety—smooth, uniform and of fine, typical shape. This potato is characterized by pink skin, shallow

eyes, blunt ends and a slightly pehhled appearance, peculiar only to this variety.

In anticipation of the unusual heavy demand, we have in stock a very fine and large supply of excellent potatoes.

PRICE: Based on placing potatoes in bags, we quote, subject to market changes: 1 bu., \$3.50.

Early Irish Cobbler In shape the Cobbler is round, with oval cross-section. Skin white, well netted. Flesh pure white. Eyes are very few and shallow. Its cooking qualities and flavor are first-class. Tubers are of good size, no small ones and very smooth and free from scab. The Irish Cobbler is one of the most reliable of the first early sorts and an unusually heavy yielder for an early potato, excelling in this respect many of the late main crop varieties. It ripens very evenly, every hill seeming to ripen at one time. Its strong growth, earliness, productiveness, fine eating quality, and handsome appearance will always cause a good demand for the Irish Cobbler. **PRICE:** 3 lbs., 50c; prepaid. Peck, \$1.00; bu., \$3.50.

Bliss Triumph, Extra Early Bliss' Triumph is the standard extra early. We are all familiar with it as sold at the groceries when the first new potatoes are shipped in. The tubers are nearly round, smooth, medium in size, reddish pink in color.

Our Red River grown Triumphs cannot be excelled. The illustration shows them just as they look, smooth, round, very desirable in shape and size. **PRICE:** Pk., \$1.00; bu., \$3.50.

Early Six Weeks This is the best seedling of our grand Early Ohio, which is also the parent of several other good varieties. The Early Six Weeks outrivals all other varieties in extreme earliness, also excels in productiveness. The tubers are of a handsome oval form, almost the same in shape and color as the Early Ohio, but are not quite as much inclined to run elongated. The flesh is of extreme whiteness, both raw and when cooked. The potatoes grow closely to the plant and are therefore easily harvested. Although the Early Six Weeks is such an extremely early variety, it is also a splendid

Irish Cobbler---Extra

keeper, remaining sound until late in the spring without wilting or sprouting. We have always had a very large demand for them.

PRICE: 3 lbs., 50c, postpaid. Peck, \$1.00; bu., \$3.50.

Potatoes

Continued

Eureka Extra Early

None More Quick to Mature, More Proof Against Drought and Blight.

A famous extra early, a little earlier even than Early Ohio. It has become immensely popular, and is much sought after, especially by market gardeners. The seed is always in demand and sells at a premium over other earlies.

Eureka Extra Early has never failed to produce a large crop of extra early potatoes. The plant is dwarf and compact, maturing in advance of the Early Ohio. It never has the blight. The tubers are round, white skin, free from disease. Flesh, white and mealy; no cores or black specks. Quality unsurpassed.

One point alone which makes it valuable is that it resists drought better than any other potato we have grown. North, South, East and West, Eureka the past summer came off with flying colors. We again advise early orders, for while our stock is large, the demand for Eureka is simply astonishing.

PRICE: Per lb., 30c. By express or freight, per peck, \$1.00 per bu., \$3.50.

We want everyone who plants potatoes to try some of our Extra Early Eureka Potatoes this year.

POTATO FROM NATURE.
1/3 SIZE.

Improved Early Rose Potato

Northern Grown.

Every farmer and gardener knows the Early Rose potato, and nothing need be said in its favor. It has no faults. An extra early variety maturing only a few days later than the Early Ohio. The improved stock we are offering is an improved strain over the old Early Rose which has been grown on the virgin soil of the far north. It is very early, being only a trifle later than the Early Ohio and much larger. Is smooth and of handsome rose color. Quality superb, either baked or boiled, and yields immensely. Keeps sound over winter and well into spring. This new strain is rapidly gaining the place long held by old Early Rose. PRICE: Peck, \$1.00; bu., \$3.50.

Improved Early Rose Potato.

New Majestic

New Majestic was first offered to the public in 1910, since which time we have received hundreds of reports of field crops running up to 500 bushels per acre. On account of its earliness it is not affected by the usual midsummer droughts, while in keeping qualities it is unsurpassed by any variety under cultivation. The illustration does not in any way exaggerate its handsome appearance. It produces an unusually large proportion of merchantable tubers. The potatoes grow closely in the hill, and are large and nearly uniform size. It stands alone: The Great Majestic all purpose potato.

We wish we had space to tell you all we know about this wonderful Large Early Potato.

It stands to other potatoes as rich Jersey cream does to skimmed milk. As early as the earliest, and is better than the best. There is none like it. It has no equal. PRICE: 1/4 bu., \$1.00; 1 bushel \$3.50.

New Majestic.

Seed Potatoes

Main Crop--Late Varieties

Mammoth Prize

We consider this potato the most valuable of all our introductions, for it excels in great productiveness and in choice table quality. It has distinguished itself as a perfect pure variety, never getting scabby, and on account of being of a strong, vigorous growth, it is but little affected by the ravages of potato bugs.

The Mammoth Prize is, beyond doubt, the largest choice eating potato in cultivation. It is of an oblong, almost oval form, as shown in the illustration, and is of a yellowish-white color; is perfectly white fleshed and a grand cooker, retaining its flowery whiteness even when cold. The potato is late in maturing and ripens with the Carman. Growers for the market will not find another variety that is as productive and as profitable to grow as Mammoth Prize.

PRICE: Pk., \$1.00; bu., \$3.50.

Mammoth Prize.

There is no other crop that responds to a change more readily and so profitably, as a change in seed potato. There is no other crop that runs out so quickly as do potatoes.

Improved Rural New Yorker No. 2

One of the largest varieties in existence.

Large and unusually smooth, with few and shallow eyes, skin white as is also the flesh, which is of superior quality. Medium late and the best drought resister. There is no other potato of more handsome appearance than the Rural New Yorker. Although it is a large yielder it grows but few and small vines. It is very hardy and will stand the heaviest manuring without getting scabby or spotted. PRICE 1/4 bu., \$1.00; bu., \$3.50.

Rural New Yorker No.

New (?) Varieties

There is nothing sold from seed catalogs in which so much humbuggery is exercised as in the item of seed potatoes. During the past few years hundreds of alleged new varieties have been introduced and sold at high prices, and yet there are not to exceed twelve standards and well known sorts today.

Carman No. 3 The best main crop potato. The fame of this potato is unquestionably the very best main crop late potato on the market. All the Carman seedlings (originated by Mr. Elbert S. Carman, late editor of the Rural New Yorker) have proven popular; but the Carman No. 3 is already rivaling in popularity the Burbank, and is undoubtedly a much better potato. Without any exception whatever it is the **GREATEST YIELDING POTATO** ever introduced, and it may be fairly claimed that it does not yield any small tubers at all. It is of large size and of the shapeliest form. Eyes are few and shallow. It is a perfect keeper and is not surpassed as a table variety. Skin and flesh of extreme whiteness. It has no hollow hearts or any dark parts. We recommend this potato to our customers as being unqualifiedly **THE BEST** of all late sorts. PRICE: Peck, \$1.00; bu., \$3.50.

Sir Walter Raleigh One of Mr. Carman's latest and best introductions—a seedling of the Rural New Yorker No. 2. It must be acknowledged that Mr. Carman has originated some of the most popular varieties of potatoes now grown, notably the Rural New Yorker No. 2, and the Carman. Sir Walter Raleigh resembles the Rural in shape, but is a little more buff in color; the flesh is also whiter. It is a little earlier than the Rural, and the tubers are more uniform with practically no small ones, every one being of marketable size. This variety is the whitest fleshed and finest grained potato, exceeding even the Snow Flake. At the originator's trial grounds it proved to be the best and heaviest cropper of 49 varieties. It is unquestionably the best of its type, being not only the finest eating potato, but also the heaviest yielder. PRICE: Peck, \$1.00; bu., \$3.50.

Tested Seed Corn

IT ALWAYS PAYS TO PLANT THE BEST SEED CORN

We have thousands of bushels of seed corn testing 94 to 99 per cent. Consisting of all the leading Early and Standard Varieties, grown from high yielding and early maturing strains which we are offering at very low prices, consisting of carefully selected seed of high grade and high germination. Every hushel guaranteed to show a satisfactory test. We will not accept an order that is not based on entire satisfaction or money back. If for any cause you are not pleased or satisfied, return seed at our expense any time within 10 days, and back goes your money paid for it. Every bushel sold on your approval.

Among other leading varieties we grow and have in stock are Mammoth Early Iowa Yellow Dent, Reid Yellow Dent, Gold Standard Leaming, Pride of Nishna Yellow, 100 days. Iowa Gold Mine, 95 days. Iowa Silver Mine, 90 to 100 days. St. Charles White, Red Coh. Imperial White, Red. Silver King, 90 days. Pride of the North, 90 days. Queen of Nishna Yellow, 85 days. White Cap Bloody Butcher, 85 days. All our seed corn is carefully examined as to vitality, hutt and tip taken off, shelled and graded ready for planters. This catalogue gives prices and descriptions of all varieties.

Our Seed is Hand Picked, Nubbed and Butted

"Iowa, the Only 'Billion Dollar Corn State'"

IOWA—our home is in Iowa, westward toward the setting sun, just between two mighty rivers, where flowing waters run. It has towns, it has cities; it has many noble plains. It has ninety-nine counties and all have honored names.

The Jefferson-Ratekin Seed Company are located at Jefferson, the county "capital" of Greene County, a little north and west of the center of Iowa, surrounded by one of the richest, most fertile localities in the whole state of Iowa—"The real heart of the Corn Belt"—Greene County has more wealth, more automohilcs, reads more agricultural and farm papers, has more telephones, than any other county in the state, according to the population. The foundation of all this was King Corn. It was Greene County corn than won first prize over any other and all other kinds and varieties, kind or color, at the Panama-Pacific Exposition at San Francisco—the world's greatest exhibition in 1915. In short, we may be permitted to say that it is a noteworthy fact, of record, that out of 289 exhibitors from Iowa, all won prizes, on individual exhibits and displays. The display which won the grand prize for Iowa occupied a space in the Agricultural Building. The central feature was a Horn of Plenty, from which flowed fine Iowa corn. This display heralded Iowa as the only Billion Dollar State in the Union in crops and live stock. It showed Iowa's field crops and live stock in 1914 were valued at one hillion, forty million, seven hundred sixty thousand Nine Hundred and Nineteen Dollars.

GREEN COUNTY PRIZE WINNER

No. 302, Early Iowa Yellow Dent

No. 302--Iowa Yellow Dent This excellent variety of yellow dent corn was originated and first sent out by the State Agricultural College of Iowa at Ames, and is known as No. 302, and is a new introduction. It has now been thoroughly tried out in Greene County, where it proved such a phenomenal success, both by reason of its early maturity and heavy yielding qualities that it quickly attracted attention of the corn growers of this part of the state, and through a philanthropic spirit of generosity of those who got a start from it, it was sent in small quantities to friends in other states for trial purposes, and everywhere tried, planted and tested—without exception it maintained its splendid record made in this locality and proved a great acquisition and improvement over many of the so-called improved sorts. In view of the Grand Prize Winning record it has made so quickly, we are constrained to fully recommend this new variety of corn to our customers, the farmers, everywhere that corn can be matured within 90 to 100 days. We confidently believe there is no variety of yellow corn that surpasses it or even equals it for general field crop, in early maturity and in yield.

DESCRIPTION—Stalks thick and heavy. Broad blades and leafy foliage, height from 7 to 9 feet, dependent upon the land—hill or bottom; ears run from 8 to 11 inches long, usually about 10 inches, 16 to 20 rows, deep grain solidly set on a small red cob; shells 88 to 90 per cent. grain to 10 and 12 per cent. cob, weighs out two or three hushels more per wagonload than other varieties, thus proving its soundness and maturity. It is one of the heaviest yielding varieties grown, and has a record of 80, 90 and 100 bushels per acre in almost every corn growing state where planted. We unhesitatingly recommend this variety anywhere, north, south, east, or west. In addition for fodder and ensilage purposes, **THERE IS NONE BETTER** and few, if any, that equals it.

PRICE: Postpaid, ear, 35c; lb., 25c; 7 lbs., \$1.50. By freight or express, peck, \$1.75; bu., \$6.00; 5 bu. or more, \$5.50 per bushel. If wanted in ear crated add \$1.00 per bushel.

Typical Ear No. 302
Green County Grand Prize Yellow Dent.

Diamond Joe's Big Early White Corn

Has Captivated the Entire Corn World

The Earliest Maturing Big Eared White Corn Known or Grown

Has uniformly made heaviest yields everywhere either white or yellow. It resists drought and hot winds better than any other known variety.

Diamond Joe This excellent variety of corn was originated and first introduced by the Ratekin Seed House of Shenandoah, in 1905, and has been planted during this time in every section of this country where corn is grown, also in a number of foreign countries, and everywhere, north, south, east and west, it has proven one of the best, most wonderful in uniform large yields and early maturity that has ever been produced, in fact it has a record of over 200 bushels of shelled corn per acre, ninety-five days from time planted, and a record in hundreds of instances of 100 to 125 bushels and over per acre. We can fully recommend this splendid variety of corn to the farmers and corn growers, everywhere, as one, if not the best, safest and surest to plant on either rich or poor soil; also as the heaviest in yield, either white or yellow.

Droughtproof In the great drought stricken districts of Nebraska, Kansas, Missouri, Oklahoma, Arkansas, Texas and other localities, during the corn growing season of 1913, where we sold and shipped thousands of bushels of this seed corn, it withstood and resisted the drought, heat and hot winds better than any other variety, and in many places made yields of 30-40-50 and 60 bushels per acre where other sorts were almost or a total failure. This corn has made corresponding yields, everywhere, when seasons were good and were bad, and all who have been fortunate enough to plant it have won a prize by doubling their yields. In fact it would make one gasp with astonishment to read the hundreds of letters and reports we have received from farmers who have planted and grown crops from this corn—many of them are almost unbelievable, but run so uniformly alike they are undisputable.

Description The accompanying illustration is a true picture, from a photograph of this corn, showing its general type and character. From the name we gave this corn some people may draw the impression that it is a large jumbo-overgrown variety, but it is not. It, however, is a large eared corn, running somewhat larger in size than Iowa Silver Mine. Every stalk produces one and two good ears, and this is where its large heavy yield comes in. The stalks are large, strong and robust, growing to a height of 8 to 12 feet, dependent upon land, upland or bottom land, has a very heavy extensive root system and this is where its vitality to resist drought and hot weather comes in; the roots being almost equal to sorghum and Kaffir corn. Medium ears run from 8, 10, 11 and some 12 inches long and over, but usually about 10 inches, 16 to 20 rows, deep kernels, solidly set on cob of medium size. In short, this corn was bred with an eye single to heavy yields and early maturity and not for show purposes, but for all around general crop purposes. There is no variety that will do better or equal it on old, poor or hill ground, and at same time there is no variety grown that will yield more bushels of good sound corn on strong, rich corn land. It is the embodiment of all the good qualities contained in all the best varieties, it's the sure thing. Our seed stock of this corn is exceptionally fine this year (extra choice), absolutely pure and we hope to be able to fill every order that comes to us, large or small. If you are looking for the corn that will make you the most bushels and the most money, stop right now and order enough to plant your entire crop. It's the corn that will do it. Plant Diamond Joe on good land and do your part and it will make you 100 bushels per acre.

Points of Supremacy

1. It is a pure and distinct variety.
2. It is a strong, vigorous, robust grower from the start.
3. It is free from barren stalks, every stalk bearing one or more well developed ears.
4. It is very early to mature, making itself everywhere in 100 days or less.
5. It will thrive and do well in extreme dry weather and drought, when other varieties fail.
6. Diamond Joe is a superior variety of corn from every point of view and will make you the most bushels and the most money wet or dry—any season. Order enough to plant your entire crop. We are sure this corn will not disappoint your best expectations.

PRICES: Ear, postpaid, 50c; 1 lb., postpaid, 35c; 7 lbs., \$1.60
Freight or Express: pk., \$1.75; bu., \$6.50; 5 Bu., or more at \$6.00 per Bu. If wanted in ear crated, add \$1.00 per bushel.

Diamond Joe's Big Early White.

Diamond Joe's Big Early White a Prize Winner

Wins Medal of Merit on Highest Yielding and Best Dent Corn

A Plymouth County, Massachusetts, man won medal of merit on Diamond Joe corn at Panama-Pacific Exposition at San Francisco in 1915, for producing largest yield of dent corn per acre ever known in the New England States. Not only did this New England farmer win

the prize at San Francisco, but has also entered four different exhibitions and contests on yields, open to all the New England States, in which he won first prize, for greatest yield, in each and every one yielding above 130 bushels per acre.

Diamond Joe's Big White—The Greatest White Corn in the World.

He Planted Diamond Joe's Big Early White--Landed First Prize, \$100 in Gold

Mr. A. Webster Butler of Plymouth County, Mass., is an ambitious up-to-date progressive New England farmer as well as a firm believer in ideals. He first began purchasing his seeds ten years ago, and has been a continuous customer each year from the first. Since he began planting our seeds he has won many notable premiums and prizes as will be seen from his letters.

Plymouth County, Mass., Feb. 24.

\$100 in Gold: 133 Bushels It may be of interest to you to know that I won first prize, \$100 in gold, at the corn show of all the New England States for production of the largest yield per acre of sound, well matured Dent Corn. This prize was awarded me on my crop grown from the Diamond Joe's Big White corn I got from you, and which made an average of 133 bushels shelled corn per acre on my farm in Plymouth County, Mass.

Very truly yours,
A. WEBSTER BUTLER.

Plymouth County, Mass., Jan. 12.

Gentlemen—I wish to extend to you my good wishes for a happy and prosperous New Year. I planted the seeds I ordered and received from you last year, with the best of results. I planted your Diamond Joe and from it filled a 76 ton silo. From my record of 1909 I grew 86 bushels of Flint corn to the acre, valued at \$1.00; 1910 I grew 133 bushels of Diamond Joe's Big White, valued at \$1.00 per bushel, and 1911, 133 1/2 bushels, valued at \$1.00, and in 1912 I obtained 381 bushels of Mangel Wurtzel Beets from one-fourth acre. Again wishing you every good wish, I am,

Truly yours,
A. W. BUTLER.

207 Bushels Farmers and others have been attracted by the exhibition of corn that has been in the window at Dille's store for some time. It was grown by J. W. Dale, and two acres produced 207 bushels and 50 pounds, which is perhaps the largest yield of corn ever known in this community. Mr. Dale says the moles took many of the seeds and hut for this fact the yield would have been even better. In gathering the corn great care was

taken to keep the top and bottom ears, main crop, suckers ear as hushins separate. The choicest of the main crop Mr. Dale will save for seed.

The corn is white, long even ears, and is known as "Diamond Joe Two hundred and fifty pounds of fertilizer was used to the acre. The ground was in good order for planting but no extra work was done the way of cultivation.—Mitchell Tribune, Indiana.

89.6 Bushels It gives me pleasure to report the yield of seed corn donated by you last year as follows: The Diamond Joe's Big White yielded 89.6 bushels per acre; Queen Nishna yielded 74.2 bushels. Both of these varieties of corn are good yielders here, yielding also a large quantity of fodder per acre.

Very truly,
J. C. HOGENSON, Agronomist,
Utah Agricultural College (Experiment Station).

HE PLANTED DIAMOND JOE'S BIG EARLY WHITE AGAIN AND LANDED FIRST PRIZE, \$100.00 IN GOLD.

200 Bushels I have planted your seed corn since 1907, and I am now raising 200 bushels of corn per acre. Please send me your catalogue, so that I can select what seed I want for the coming season. Thanking you in advance for this favor, I am,

Truly yours,
JESSIE DeHOFF.

Laflora County, Oklahoma, March 2. Enclosed find my order for seeds. I ordered seeds from you year and got splendid results from everything. Among seeds ordered was some Diamond Joe's Big Early White Corn. I had faith in you said of it. As a result it made a yield of over 50 bushels per acre notwithstanding we had the most severe drouth we have ever had in this country, but it proved the best drouth fighter I ever seen.

Truly yours,
JOHN SHACKELFORD

Pure Genuine Iowa Silver Mine

Bred and Grown Under Isolated Conditions Especially for Seed Purposes

The Pure, Genuine Silver Mine Corn

Is one of the greatest yielding of all the white varieties. It is drouth proof of extreme vitality and does better on old, poor or hill land than any other variety. Early to mature, a big yielder and unexcelled for feeding, ensilage or fodder purposes. It is adapted to a wide range of conditions and a great success in the north, south, east and west. It makes good where others fail and brings satisfaction to the farmer who plants it. Because of the great popularity of this corn thousands of bushels of white corn are offered and sold every year under the name of Iowa Silver Mine which bears no likeness to it. Our Stock is Pure.

DESCRIPTION—Stalk medium in height, ranging from 7 to 10 feet, (dependent on the land, hill or bottom) very leafy broad blades; type of corn even and uniform; ears running from 9 to 12 inches in length; 16 to 20 rows pure white kernels solidly set on a medium small cob. Matures in from 90 to 100 days in good corn weather.

There is scarcely a township or neighborhood anywhere that corn is grown but what some of your neighbors can tell you about Iowa Silver Mine and the splendid results obtained from it. In view of this we do not deem it necessary, if space would permit, to print even a partial list of the thousands of testimonials we have received pertaining to this corn.

WE CANNOT TOO HIGHLY RECOMMEND THIS VARIETY.

PRICE: Postpaid, ear, 35c; lb., 25c; 7 lbs., \$1.50. Freight or express, peck, \$1.75; bu., \$6.00; 5 bu., or more \$5.50 per bushel. If wanted in ear crated add \$1.00 per bushel.

Johnson County White

Single Ear Won \$1,000 in Prizes

This variety is a cross between Boone County White and Forsythe Favorite and was developed by an Indiana farmer and has had 18 years of careful painstaking and intelligent selection and breeding. While a late maturing variety, we are quite sure there is no white corn grown today of greater merit or better suited to the central and southern corn belt. It has become somewhat famous for the large yields it has made in Missouri, Southern Illinois, Indiana and Ohio, and from there south, but is hardly early enough to be relied upon to always mature in Iowa, or north half of Illinois and that latitude.

The shape of the ear is cylindrical to within about 2 inches of the tip, then slightly tapering. Tips fill well over the end of the ears. The husks are well rounded out with a medium sized shank, kernels uniform wedge shaped, pure white, and white cob; ears average about 10 inches in length, with the circumference about three-fourths the length.

Of strong and vigorous growth and well covered with broad blades—very valuable for ensilage. The length of season is about 130 days. This corn has been successfully grown as far north as Des Moines, Iowa, Peoria, Ill., Fort Wayne, Ind., or Marion, Ohio. We recommend it for the great corn-growing districts of Springfield, Ill., Terre Haute, Ind., and corn-growing latitudes of the south.

PRICE: Postpaid, ear, 35c; lb., 25c; 7 lbs., \$1.50. Freight or express, peck, \$1.75; bu., \$6.00; 5 bu., or more \$5.50 per bushel. If wanted in ear created, add \$1.00 per bushel.

Iowa Silver Mine.

Our pure bred Iowa Silver Mine corn, best corn, most famous, more widely known and planted in any corn in the world; has greatest record of any corn on earth. It's an early maturing corn. It's a corn for the north, south, east and west; makes good where other sorts fail. It brings prosperity to the man who plants it.

Johnson County White.

Imperial White This is a white corn with a red cob. A variety that has become very popular and a great favorite with our customers—the farmers everywhere. This means about everywhere that corn is grown, for we have sold and shipped it to farmers in every state in the Union—hundreds and thousands of bushels every season, especially since we have got it so well introduced; thus we can say for it that there is no variety, white or yellow, that has given better or more uniform results and satisfaction than "IMPERIAL WHITE."

We originally obtained our start of this excellent variety of corn, about sixteen years ago, from a farmer in Central Northern, Illinois, one of the best corn growers of that splendid corn growing section, who had grown it and improved it for many years to the exclusion of other sorts. Since we began growing this variety, it has not only become a favorite with us, but we have sent out hundreds and thousands of bushels of it to every part of the country, north, south, east and west, every year, especially within the past 10 years—since we got it well introduced and found what splendid satisfaction and results it gave everywhere. In fact, we do not recall to have ever had a bad report or dissatisfied customer who planted of this variety of corn.

DESCRIPTION—It is pure white, with red cob—a sign within itself of great vitality; ears run from 9 to 12 inches long, measuring from 7 to 8 inches in circumference; 16 to 24 rows of deep grains firmly set on a small red cob; as shown by the accompanying illustration, producing one or two and often three good ears to the stalk. The stalks are short and heavy, averaging from 7 to 10 feet in height, with a large amount of foliage. This corn does well anywhere and everywhere, and is especially adapted to old, poor and thin land, and will make a good crop where other sorts fail. It is also especially adapted to the eastern and southern states, and where early drouth and parching hot weather often injures other sorts. It matures safely anywhere in from 90 to 100 days; is very solid and compact. We can heartily recommend this corn to our customers as one of the surest croppers and best yielders we grow, and could print hundreds of testimonials from those who have tried it, if space would permit, all verifying what we have said of this splendid variety of corn.

PRICE: Postpaid: Ear, 35c; lb., 25c; 7 lbs., \$1.50. Freight or express: Peck, \$1.75; bu., \$6.00; 5 bu., or more, \$5.50 per bushel. If wanted in ear crated add \$1.00 per bushel.

Hickory King

HICKORY KING is a white variety of field corn which has the largest grains with smallest cob of any corn in existence. The grains are so large and cob so extremely small that when the ear is broken in two pieces a single grain will cover completely the cob section. This corn is of vigorous habits, is a splendid and sure cropper, is especially well suited to light or thin soil, and is a very desirable variety and largely planted in many of the southern states. It, however, does well in the northern and central western states, but does not mature as early by 30 days or more as our Silver Mine, Diamond Joe or Imperial; ears run from 7 to 9 inches long, and usually contain 12 rows of kernels on the cob—wital it does better on real thin soil, and stands drouth equal to Milo Maize. Yields 20 to 35 bushels per acre.

PRICE, Postpaid: Pound, 35c; 7 lbs., \$1.60. Freight or express: Peck, \$2.00; bu., \$6.50; 5 bu., or more, \$6.00 per bushel. Our stock is all shelled.

WHAT THE FARMER WANTS IS THE MOST BUSHELS OF GOOD SOUND CORN PER ACRE.

The important point in which the practical farmer is interested in is the most bushels of good, sound, solid corn to the acre. The score card and the corn shows have their place, but the commercial corn growing farmer should not allow himself to become absorbed in ideal ears, unless they can show by records prepotent power of reproduction. In many competitive exhibitions and corn shows we have seen fellows carry away premiums and prizes on most perfect ears; ears selected to conform with the score card by which they were to be judged. Credit for such exhibitions in many cases are due more to an understanding of the score card by the exhibitor than to the general excellencies of reproduction. In fact, we have seen some very perfect ears of corn grown in a field of the most scrubby sort, ears that would have made a creditable showing at any farmers' institute, state or national corn show, and it put up and sold at auction would have no doubt brought fabulous prices.

Theoretically, a mother ear should be cylindrical, well filled out at butt and tip ends; kernels evenly and closely set on the cob and as nearly uniform in size and shape as possible, thus securing an even, uniform stand. But hark of this there must be a performance record.

In other words, its ancestors should have a record of its performances under ordinary conditions. Seed coming from ordinary looking ears, but possessing such drains of inherit power as to produce a medium sized ear on a maximum number of stalks, is certainly far preferable, and more profitable for the farmer, to plant, than the "finest" show corn ever put on exhibition at a corn show which has been selected MERELY from point of beauty, and in accordance with the score card. This is not saying that nothing can be accomplished by physical selection alone, and planting of seed from good, symmetrical ears. A whole lot can be accomplished both in improvement of type and to a certain extent in yield but corn cannot be bred up to perfection and highest degree in one, two or three years.

After all is said, what the ordinary farmer wants who plants and grows corn for feeding and commercial purposes, is seed corn that will grow, and varieties that will give him the most bushels of good, sound, solid corn to the acre, containing protein of the most nutritious and best fattening quantities, and that sells at best prices on the market and to feeders. We believe our seed meets this requirement in every respect.

Seed Corn

Continued

Saint Charles White This excellent variety of white corn was originated in Saint Charles County, Mo. and is very popular with many farmers who have grown it and become wedded to it—plant it to the exclusion of other varieties. We can recommend it as one among the best standard sorts.

DESCRIPTION—Saint Charles White is a very handsome pure variety of white corn set on a red cob, ears usually 8 to 10 inches long, 16 to 18 rows of deep, broad kernels. Stalk grows from 8 to 10 feet high, dependent upon the land upon which it is planted, lowlands and bottom producing the taller stalks; the stalks growing broad, succulent blades, making it very desirable corn for general crop purposes for grain, fodder or for ensilage purposes. Our customers in east, west, central west and south for the grain crop, and in the east and north for ensilage and fodder.

PRICE, Postpaid: Ear, 35c; lb., 25c; 7 lbs., \$1.50. Freight or express: Peck, \$1.75; hu., \$6.00; 5 hu., or more, \$5.50 per bushel. If wanted in ear crated add \$1.00 per bushel.

Saint Charles White.

Wallace's Favorite White.

Wallace's Favorite White We place this superior variety of corn before our customers for the eleventh year with renewed assurance that experience has demonstrated and proven it one of the best, highest yielding varieties of all our introductions. While we do not claim it will make two, three or four hundred bushels per acre, we know it can be relied upon to yield as many bushels of good, sound corn per acre as 120 days as any variety to be found and if planted on good ground will yield from 90 to 100 bushels per acre, and even more under perfect conditions.

DESCRIPTION—The stalk is large, strong and robust, usually from 8 to 10 feet high, with long, broad leaves, extending from joints, which are close together and producing one and two good ears to the stalk, running from 8 to 12 inches long, with 16 to 20 rows of grains on white cob. Surely this corn will not disappoint your best expectations. Try it, no matter where you live—east, west north or south. It is not only good for the grain it grows, but one of the best combination varieties for grain, fodder and ensilage purposes there is grown. It will please you.

PRICE, Postpaid: Ear, 35c; lb., 25c; 7 lbs., \$1.50. Freight or express: Peck, \$1.75; hu., \$6.00; 5 hu., or more, \$5.50 per bushel. If wanted in ear crated add \$1.00 per bushel.

Boone County White This is a large white corn, perhaps the largest stock and largest eared field variety there is grown, either white or yellow, and is a great favorite with some of our customers where the seasons are long enough for it to mature, which requires from 130 to 140 days ordinary corn weather. The stalks grow from 9, 10 to 12 feet in height; ears from 9 to 12 inches in length; 16 to 22 rows deep grains on medium large cob-like all-white varieties, it does better on old or thin soil than yellow

sorts, and gives corresponding yields on good, rich or bottom land. With favorable seasons, where it has plenty of time to mature it is a valuable and very productive variety; say the states of Kansas, Missouri, southern half of Illinois, Indiana and from there south to the Gulf Coast states. Our seed stock of this variety is pure, and especially fine, well matured, and can be relied upon to germinate and give a good or perfect stand under reasonable weather conditions.

PRICE: Same as Saint Charles White and Wallace's Favorite.

Pride of Nishna--Yellow Dent

Forty-nine Years Scientific Breeding and Improvement Behind this Corn

"PRIDE OF NISHNA"—YELLOW DENT CORN—THE CORN THAT MADE US FAMOUS.

We Believe "Pride of Nishna" Will Produce More Bushels Per Acre than any Yellow Corn the Farmer can Plant

Pride of Nishna This grand variety of Yellow Dent Corn is one of the few varieties of field corn that has a history of forty-nine years improvement behind it. It was the first seed corn planted by Mr. J. R. Ratekin after migrating from Central Western Illinois and settling in South-western Iowa, in 1867, fifty years ago. At that time "corn was just corn," same as it is yet, in some localities, but since then most all leading progressive farmers have come to realize that there is as much difference between thoroughbred and pony and Percheron or Clydesdale stallion. Mr. Ratekin, being an enthusiast and strong believer in planting only the best improved varieties, began this improvement at the start, by careful selection of his seed from year to year—crossing and re-crossing varieties, and at the same time started a breeding plot in an isolated place, away from other corn, and by this process it was not many years until he had developed one of the best, highest yielding and early maturing varieties of corn that is today grown anywhere in the United States. It was after 17 years of this kind of work that Mr. Ratekin engaged in the growing of seed corn for the commercial farm trade, and it was at this time that he named this grand improved variety of corn "PRIDE OF NISHNA," named for and after the Nishnabotana River Valley, known far and wide as the best and most famous locality for growing corn and seed corn that can be found in the United States or anywhere in the world, as rich, bountiful and productive as the Valley of the Nile; just far enough north and far enough south to safely mature all the best standard field varieties as well as all the early and extra early sorts, and some of the late and largest varieties.

During the past thirty-two years we have sold no less than a million bushels of this variety for seed—over 75,000 bushels, wholesale and retail in 1917, making shipments to every state of this Union, including every county in Iowa, Illinois, Missouri, Indiana and Ohio, and every county in Nebraska and Kansas where corn is grown, and everywhere it has proven a tremendous yielder and top-notch, always maturing in 100 days in the north and 90 days in the southern states.

We can fully recommend this variety for any county in Iowa, Illinois, southern Wisconsin, Michigan and New York; also any part of Indiana, Ohio, Pennsylvania and West Virginia, and from there south to the coast. It is a splendid ensilage corn for states and localities located farther north than those mentioned.

DESCRIPTION—The stalks grow 8 to 12 feet high, dependent on the land—hill or bottom ground—stalks strong and robust, very leafy, broad blades and plenty of them, making an excellent fodder or ensilage corn. Roots almost equal to that of sorghum, always resisting wind and storm and standing up well. Ears uniform in size and shape, cylindrical from butt to tip, running from 9 to 12 inches long and 7 to 8 inches in circumference, containing from sixteen to twenty rows of deep kernels solidly set on a medium small red cob, shelling 86 to 88 per cent. grains and often even more. A wagon load of this corn weighs out two to four bushels more than ordinary varieties, thus proving its solidity. It is a golden yellow, and a big crih full of it is a beautiful sight to look at. Its potency or power to reproduce is so great that neither dry or wet weather effects its growth and maturity as they do many other sorts. By long and continued selection the barren stalks have been eliminated, which has materially increased its yielding qualities. It is the earliest maturing large eared yellow corn known or grown, always making itself safely and soundly beyond danger of frost in from ninety to 100 day's good corn weather. Our word for it, it will please you in every respect.

PRICE, Postpaid: Ear, 50c; lb., 35c; 7 lbs., \$1.60. Freight express: Peck, \$1.75; bu., \$6.50; 5 bushels or more, \$8.00 per bushel. If wanted in ear crated add \$1.00 per bushel.

Gentlemen: It is with much pleasure that we state that during the many years' advertising you have done in our paper we can find record of having received complaint from only one of our many thousands of readers who patronize you, and you at once settled that complaint promptly and more generously than the complainant had an right to expect. We therefore can honestly endorse your methods of doing business.

Wishing you the very best success the coming season we are, very truly yours,
LAWRENCE PUBLISHING CO.

De Payster, New York, March 1.
Gentlemen: I find myself, unexpectedly in need of some seed corn and have always had good success and results from all your seed having purchased over thirty bushels of you last year, I would like you to make me best and lowest prices on the following varieties, —
Respectfully yours,
ROY BADGER.

Mammoth Iowa Yellow Dent

FAMOUS FOR ITS UNIFORM LARGE EARS, HIGH YIELDING QUALITIES AND EARLY MATURITY.

Resists Drought and Scorching Hot Weather Better Than Any Other Variety of Yellow Dent Corn.

Mammoth
Early Iowa Yellow Dent
The World's Greatest

Yellow Dent Corn
Earliest to Mature and
Largest in Yield

Mammoth Early Iowa Yellow Dent 100 Day Corn

MAMMOTH EARLY IOWA YELLOW DENT is a variety of great merit, originated, introduced and named by us in 1911, and it has met with hearty favor wherever it has been tried and tested. Our description of MAMMOTH IOWA YELLOW DENT CORN consists of simple facts. The accompanying illustration is from a photograph of a bunch of eleven ears, including the one broken in two pieces, which will give a very accurate idea of the ears; stalks grow from 8 to 10 feet in height, dependent upon the land, upland or bottom, and is supported by a remarkable root system to support its large, strong, robust stalks, thus enabling it to resist heavy winds and not break over or blow down; ears run from 8 to 12 inches long, very symmetrical and containing 16 to 20 rows on a medium sized cob; kernels of more

than average depth; matures safely and soundly in about 100 days, and is indeed properly named Mammoth Early Iowa Yellow Dent. Beautiful in its rich, golden yellow color and even size from butt to tip of ear. Certain in its early, quick growth and maturity, and, all points considered, a splendid, large-eared, early maturing yellow corn, "up to date." We can fully recommend this splendid variety to our customers everywhere, and assure them that they will make no mistake in planting largely of it

PRICE, Postpaid: Ear, 35c; lb., 25c; 7 lbs., \$1.50. Freight or express: Peck, \$1.75; bu., \$6.00; 5 bushels or more, \$5.50 per bushel. If wanted in ear crated add \$1.00 per bushel.

Pure Genuine Iowa Gold Mine EARLY

The Best Medium Early; Between the Standard Field and Extra Early Sorts.

Iowa Gold Mine—Yellow as Gold Itself—Early; Between Pride of North and Standard Sorts.

The Earliest to Mature; the Purest Yellow; the Deepest Grain; the Best Early; Standard Field Variety. This wonderful early variety yellow corn has made the state of Iowa famous, as it is more widely grown than any other variety grown and is planted in every state in the Union. Gold Mine is a favorite with every farmer who ever planted it. It matures in 80 to 90 days. Ears are medium in size, 8

to 10 inches long; color a bright golden yellow. It is free from barren stalks; every stalk bears one and two good ears.

PRICE, Postpaid: Ear, 35c; lb., 25c; 7 lbs., \$1.50. Freight or express: Peck, \$1.75; bu., \$6.00; 5 bushels or more, \$5.50 per bushel. If wanted in ear crated add \$1.00 per bushel.

The Most Popular Yellow Dent Corn
in the Great Central Corn Belt

Reid's Yellow Dent

Large Ears, High Yielding Qualities;
and Early Maturity

A Thoroughbred Yellow Dent

If any seed can be truly called pedigreed, 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 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 huskers. Best shredded sort, as it shatters the least of any by actual test.

In some of the principal corn growing states of the West it has no equal, and reports from many other states are very flattering. The Iowa Experiment Station report of 1910 gave the Reids' Yellow Dent an average of 100 bushels per acre, while the Agricultural Students' Union of Ohio in 1913 gave it a yield of 14 per cent. above all other varieties. As a winner of prizes from the World's Fair at Chicago in 1893, and at Western Corn carnivals and shows down to the present time, it stands at the head.

PRICE, Postpaid: Ear, 35c; lb., 25c; 7 lbs., \$1.50. Freight or express: Peck, \$1.75; bu., \$6.00; 5 bushels or more \$5.50 per bushel. If wanted in ear crated add \$1.00 per bushel.

Gold Standard-Early Leaming

Ears, Gold Standard Leaming.

The King of Cattle Corn

This corn was originated by Mr. J. S. Leaming in Ohio in 1826, and was introduced into this part of Iowa forty-five years ago, by pioneer settlers who came here from Ohio. Even at that early date, long before scientific corn breeding was taken of, it was noted for its uniformity and purity, also its distinct characteristics and was extensively known by stock feeders. Since its first introduction many strains of Dent Corn have been started from this oldest known variety, but during all the years we have grown it we have adhered to and followed the original type started with, and by careful selection year after year, have greatly improved this excellent variety until it cannot be excelled.

GOLD STANDARD LEAMING is known as the **KING OF CATTLE FEEDERS' CORN**. There is none better—none yielding more bushels per acre. Being rich in protein and oil, it is ideal from a feeder's standpoint. In addition to its large grain yields it is grown extensively in the East, New England, New York, Pennsylvania and the Dakotas, for ensilage and fodder purposes of which it makes a wonderful supply of the best.

DESCRIPTION—Early Gold Standard Leaming is a pure and distinct variety of beautiful golden yellow. It grows a strong, rugged stalk 8 to 12 feet, dependent upon land, hill or bottom, very profuse, broad blades, making it one of the best ensilage and fodder varieties, ears contain 16 to 20 rows solidly set on small red cob, most stalks containing two ears, running from 8 to 10 and 12 inches long, usually about 10 inches; matures in 100 to 110 days good corn weather. We recommend this corn to farmers and feeders as a most excellent variety to plant.

PRICE, Postpaid: Ear, 35c; lb., 25c; 7 lbs., \$1.50. Freight or express: Peck, \$1.75; bu., \$5.00; 5 bushels or more, \$5.50 per bushel. If wanted in ear crated add \$1.00 per bushel.

Improved Pride of the North

This variety of early corn was originated by A. L. Goddard of Kossuth County, Iowa, (one of the extreme northern counties of Iowa) thirty years ago. It is a great favorite in the extreme northern states. A pure yellow dent, ears from seven to nine inches long with small cob and deep kernels, ears carrying from 14 to 18 rows. Will ripen and mature any place in from 80 to 90 days; can be planted as late as June 25th and make itself by September 15th. Good soil is capable of growing four to six stalks to the hill. Many stalks have two ears and usually produce from 30 to 40 bushels per acre.

PRIDE
OF THE
NORTH

Reid's Genuine Yellow Dent.

PRICE, Postpaid: Ear, 35c; lb., 25c; 7 lbs., \$1.50. Freight or express: Peck, \$2.00; bu., \$6.50; 5 bushels or more, \$6.00 per bushel. If wanted in ear crated add \$1.00 per bushel.

Legal Tender A Big Yellow Dent Corn

This is one of the best of large, medium late varieties. It is a very productive corn where seasons will permit it of maturing, and its no uncommon thing to find ears 12 inches long that weigh from 1 to 1½ pounds each. The stalks grow 8 to 12 feet high, with very heavy foliage, which makes it valuable for fodder and ensilage purposes as well as for the grain. Legal Tender has been a great premium taker, and to those who want a large, late variety of corn we can assure you that you will find in it a splendid variety—one that will become a permanent fixture on your farm. Under favorable conditions this variety will mature in 120 to 130 days, and seems to be well adapted to any place or locality where the seasons are long enough for it to mature. Our seed stock of this variety is pure bred of inherited stock of choice quality and will give you the best results, and you can depend upon it.

PRICE POSTPAID: Ear, 35c; 1 lb., 25c; 7 lbs., \$1.50.
Freight or express: Peck, \$1.75; 1 bu., \$6.00; 5 bu. or more, \$5.50 per bu. If wanted in ear crated, add \$1.00 per bu.

Improved Calico Corn

This corn is the old fashioned kind, and always very popular as a feeding corn, and for many years we have had a great demand for it from stock feeders. So great has been the demand for this excellent feeding corn that we have given greater attention to it the past few years than in former years. Five years ago we found a superior type of this corn, grown by a leading corn breeder in Kentucky, from whom we obtained seed, which has proven a wonder, and without fear of contradiction we can say we have the highest and best strain of this corn that can be found anywhere. The strain is of the large-eared kind, deep grain and small cob, thus insuring early maturity. The ears run from 9 to 12 inches in length and measure 7 to 8 inches in circumference. It is a combination in color of red, white and yellow stripes. It is full of protein and very rich, stock like it and eat in preference to other corn. To all of those in want of one of the best corns for stock feeding, we can say we are in position to supply you with the very best of seed.

PRICE POSTPAID: Ear, 35c; 1 lb., 25c; 7 lbs., \$1.50.
Freight or express: Peck, \$1.75; 1 bu., \$6.00; 5 bu. or more, \$5.50 per bu. If wanted in ear crated, add \$1.00 per bu.

Fodder or Ensilage Corn

A great many dairy farmers and stockmen nowadays plant an early or some medium early standard variety of corn—that they can use for either fodder or ensilage purposes—corn which they can let stand near or until maturity and if they prefer same to be fed as bundle corn during fall and winter. By doing so they handle considerably less bulk, such as coarse stalks and a large amount of moisture, and provide a very nourishing and milk producing feed in a more condensed form. That it is an advantage to plant earlier maturing varieties of fodder corn is now generally acknowledged. In fact there are many, very many, who prefer for fodder smaller growing corn than the large and later varieties, claiming for it the following advantages: First, that it matures earlier and gives well formed and partially or fully ripened ears; that it is more easily cured; that the smaller stalks make finer and richer fodder. And we believe in this theory to a large measure—therefore, we want to especially recommend Gold Standard, Leaming, Pride of Nishna, Iowa Silver Mine, Imperial White, St. Charles White, Diamond Joe's Big White, Dakota Bloody Butcher (early) 85 days, Iowa Gold Mine, Queen of Nishna (early) 80 day.

Improved Stowell's Evergreen If there is a variety of corn that is entitled to a whole page in this book, as a general utility crop, for the table, for canning purposes, for nutritious food for the human family and all kinds of stock, from the hog to the horse, to cut up and throw out to them during the latter part of the season when grass and clovers are dead or dried up, or to cut up for fodder for winter feed, it is Stowell's Evergreen Sweet Corn. It matters not what the cost of the seed, even at \$10.00 per bushel, it will pay every farmer to plant a few acres, enough to carry his stock, whether many or few, through the late summer and early fall months when pastures are dead or dried up. Yes; among all the splendid varieties it is a most excellent variety to cut and throw out to milk cows, horses, hogs and the colts and calves during the summer and fall months, when grass is dried up and pasturage short. As a green fodder fed in this way one acre will furnish as much feed as eight acres of grass. In addition for fodder purposes we regard Stowell's Evergreen Sweet Corn as one of the most valuable grown, either for

canning or for seed purposes, either of which makes it a desirable and profitable crop. There is no waste whatever in this corn.

Plant with drill in rows, 3 feet apart, eight to ten kernels to the foot in the row. Cultivate thoroughly, plowing deep and close to the corn the first time, after which cultivate shallow until three feet high. This variety of corn will make you from fifteen to thirty tons to the acre.

FOR PRICES: See Price List enclosed.

Giant Yellow Fodder Corn This is among the best big varieties for either fodder corn or to put up in the silo, or to cure and stack away, cropping as high as thirty-five tons to the acre.

PRICE: Peck, \$1.50; 1 bu., \$5.50; 5 bu. or more \$5.00.

Big Southern Red Cob Fodder This is a standard southern variety which has made a wide reputation all over the country, and is noted for its splendid qualities for both fodder and ensilage purposes. It grows very tall, ranging from twelve to sixteen feet, and is a very leafy, broad blade.

PRICE: Same as Yellow Fodder Corn.

Eureka Ensilage Corn grows the tallest stalk and has the most leaves and blades and will produce more tons of material for the silo than any other variety. Stalks usually grow 10 to 14 feet high, containing 24 to 30 pairs of long broad blades; has made a record of over seventy tons on one acre of ground. Enough to feed ten head of cattle twelve months.

PRICE: Same as Yellow Fodder Corn.

Silver King for Northern States

A SUPERIOR NINETY-DAY VARIETY SUITABLE FOR NORTHERN PLANTING.

Pedigreed Seed Corn, like pedigreed stock, must have a record behind them showing their ability to produce larger yields than other leading varieties under precisely the same conditions and same treatment, also their vitality to resist extremes of seasons and weather to the utmost degree.

Silver King is an extra early white variety, and originated with Mr. A. L. Goddard, of Kossuth County (near Minnesota line), who also originated Pride of the North more than thirty years ago.

Attention was first directed to Silver King Corn through the efforts of Mr. H. J. Goddard of Winneshiek County, Ia., Winneshiek County being one of the extreme northern counties of Iowa (bordering on the state of Minnesota), who in his day ranked as the foremost corn breeder in Iowa. Its origin can be traced back to Indiana, for it was brought from that state to Fayette County, Iowa, in 1862. In 1869 Mr. Goddard secured a half bushel of this seed. The possibilities of developing a very superior type or variety of early corn from the stock so appealed to him that he continued to grow it, selecting each year the type of ear which came nearest his ideal. This has had much to do with the present uniform type of the corn. While he gave special attention to early maturity, at the same time he selected an ear of good size, deep kernels and comparatively small cob, with little space between the rows.

This corn has not been grown very much south of the north Iowa district, but it will make a good crop anywhere. Because of its extreme earliness it will be safe to plant in the North, where the larger later sorts will not mature sufficiently, and in the southern and central corn belt will be ready for feeding thirty days ahead of Reid's Dent or the large late varieties. Very popular wherever known.

Mr. Goddard gave it the name "Silver King," which is the proper designation. It has been tested and bred for a number of years by the Wisconsin Agricultural Experiment Station at Madison, who disseminated it under the name "Wisconsin No. 7," and from this it became known among some of the seed trade as "Wisconsin White Dent." It is, however, an Iowa corn, and we are offering it under the Iowa name, as our stock is produced in this state. By reason of the publicity given it by the Wisconsin station it has become the most popular variety in that state, and under the Wisconsin title has been disseminated in Minnesota and other portions of the northern corn belt.

Has yielded 93 bushels per acre with ordinary methods of cultivation. The record yield is 137 bushels per acre, pro-

PRIZE WINNER

duced in Wisconsin in 1913, in the acre contest for that year. In the same state, in the boys' acre contest, the record was 133 bushels per acre. Of course these were forced yields, but we believe on strong land with three stalks to the hill, a hundred bushels per acre can be harvested. There is no question about its yielding qualities.

Prof. Moore of the State Agricultural College of Wisconsin, who was instrumental in introducing this corn into Wisconsin, says: "In the first year of its introduction into this state, 1907, it made a yield of 98.6 per acre on our experimental grounds, and an average yield for the whole state of 57 bushels per acre, as compared with 33 bushels, the average of all other varieties."

In Kossuth County, Iowa, Mr. Will Banks had much to do with the introduction of this corn in northern Iowa, exhibiting it and winning many prizes at county and state exhibitions. Space will not admit of hundreds of first premiums, prizes, sweepstakes and championships won on Silver King, but we cannot refrain from speaking of two boys in northern Iowa, who won over \$1,200 in prizes at exhibitions inside of five years after they began growing this corn.

DESCRIPTION: In appearance is a beauty. Ears averaging eight to ten inches, uniform in size and type, pure white in color, set compactly in straight rows, a strong grower, early enough to mature as far north as St. Paul, Minn.; has a decided double-ear characteristic, one reason for its fine yield records.

PRICE POSTPAID: Ear, 35c; 1 lb., 25c; 7 lbs. \$1.50. Freight or express: Peck, \$2.00; 1 bu., \$6.50; 5 bu. or more, \$6.00 per bu. If wanted in ear crated, add \$1.00 per bu.

Extra Early 90-Day Corn Queen of Nishna A Thoroughbred Yellow Dent Corn for Northern Latitudes or Late Planting

QUEEN OF NISHNA—THE EARLIEST, HARDIEST, MOST PRODUCTIVE NINETY-DAY CORN GROWN.

This variety of corn was originated by us and while it was well nigh perfection itself when we first began to catalog it, we have constantly tried to improve it in every way we could by culling out all barren stalks and increasing the number of ears to each stalk, and during the past ten years we have made yields of over 60 bushels per acre, and in 1914 we grew the enormous yield of 94 bushels on our experimental grounds, or over 20 bushels per acre better yield than from any one of six other early varieties, side by side with it on the same ground under identical conditions. We have frequently gathered good, sound, solid, well matured hard corn from it in 75 days from the time it was planted and we have

shelled corn from it 85 days from time of planting. For an early feeding corn Queen of Nishna 90-day Corn has no equal. This makes an ideal ensilage corn for the northern farmer, maturing before frost and making a large yield. For the eastern farmer the same may be said, adding that this makes a fine feeding corn. In the south this corn has taken the place of the well known June corn, making a greater yield and being a fine drought resister.

PRICE POSTPAID: Ear, 35c; 1 lb., 25c; 7 lbs. \$1.50. Freight or express: Peck, \$2.00; 1 bu., \$6.50; 5 bu. or more, \$6.00 per bu. If wanted in ear crated, add \$1.00 per bu.

Improved White Cap Dakota Bloody Butcher

Improved White Cap Dakota Bloody Butcher (early) 85 to 90 days.

Dakota Bloody Butcher is a very early, heavy yielding variety of corn—one of the very best, most hardy and most certain to always make a good crop, wet or dry, on either rich or poor land.

We obtained our original seed of this variety in central South Dakota in 1907, eleven years ago. On account of its early maturity there and its yielding qualities, it was grown where we got our seed, almost to the exclusion of all other field varieties. It is a distinct variety of corn, one of itself. There is none like it. Thus it bears the name given it by the originator, "Dakota White Cap Bloody Butcher," years ago. It can easily be distinguished from any other variety we have ever seen. On the ear, outside, top of kernel it is white capped; inside after shelled it looks a bloody red color; cob as white as snow; ears long and slim, running from 12 to 16 rows, and many of them 15 inches long—perhaps running more uniform in size and length than any other variety; rows very solidly set on cob; depth of kernel only medium—almost as broad as it is long. When we first introduced this corn the ears did not run as large as our Improved stock of it has since, and does now. This we attribute to the fact that we have greatly improved it by careful selection of our seed stock. Being of an entirely different type of corn from other sorts—not as handsome and attractive to the eye as a golden yellow, or white as snow, farmers were slow to give it a trial, but practically every one, without exception, became so pleased with it, practically all have adopted it as one of their main field varieties, which has proven not only to be fully two or three weeks earlier to mature than the ordinary standard varieties, but among their heaviest yielding sorts. Here with us, the past season, which was ideal for corn, many of our farmers obtained an average of 60, 70 and 80 bushels per acre. In fact, greater and heavier average yields from it than from other varieties. When we first started to list this corn, we listed it only as an extra early variety, and claimed it to yield only 30 to 50 bushels per acre, under good conditions, but it has proven always to exceed yields in excess of our claims for it. It has also responded to careful attention, more quickly and definitely, from careful selection of our seed stock, than any other variety we have attempted to improve or propagate beyond its normal habits. Since this improvement has been so manifest, compared with what it was when we begun its introduction, we are now selling fifty bushels of seed where we only sold one, seven or eight years ago. In short, it is an early sort that any farmer can tie to, and the more he plants the better pleased he will be. The nutritious qualities of the Dakota Bloody Butcher corn is very high; many stock feeders claim that one bushel is equal to 1½ bushel of ordinary varieties. We, however, do not claim this much for it, but it is certainly of unusual nutrition, a variety of corn that is worth considering. It does better on old, poor, thin land than any other variety, save possibly "Hickory King." But Dakota Bloody Butcher being full six

weeks earlier to mature and yielding twice as much per acre, there can hardly be a comparison made between them. Length of time for it to mature is from 80 to 90 days. For early feeding there is no corn that surpasses it. Every stock farmer should plant some of this corn. It will not disappoint your best expectations.

PRICE POSTPAID: Ear, 35c; 1 lb., 25c; 7 lbs. \$1.50. Freight or express: Peck, \$2.00; 1 bu., \$6.50; 5 bu. or more, \$6.00 per bu. If wanted in ear crated, add \$1.00 per bu.

White Cap (Large Eared) Early Yellow Dent

White Cap Yellow Dent We have grown and handled this excellent early variety very extensively for several years and have found it a very early maturing corn and an enormous yielder for an early corn. It, however, is not quite as early as "Queen of Nishna" or Dakota Bloody Butcher, but is equally as early as "Pride of the North" and we regard it as a much larger yielder and while we do not admire the color of this corn as much as we do a pure yellow or white, it produces the bushels and for feeding or market purposes it is equal to the clearest white or yellow corn grown. The grain is a white cap, and the balance of it is a pale color between a white and yellow. All those who have planted it are wonderfully pleased with it, and the increased demand for it, also reports we have received, many of which are really astonishing, compel us to recognize the fact that White Cap Yellow Dent Corn has come to stay. Our stock of this corn is invariably exhausted every season that we have been handling it, thus proving its growing popularity as we have grown an increased acreage and quantity of it each succeeding year.

I am not advising you to plant all your crop to this variety to the exclusion of other sorts, but for a field of corn for early harvest and for feeding, you will do well to try ten or twenty acres of it. I have known instances, plenty of them, where it was planted as late as June 15th and it produced sixty, seventy and eighty bushels of good, sound corn to the acre.

PRICE POSTPAID: Ear, 35c; 1 lb., 25c; 7 lbs. \$1.50. Freight or express: Peck, \$2.00; 1 bu., \$6.50; 5 bu. or more, \$6.00 per bu. Our stock is all shelled.

Improved Early Flint Varieties

MAMMOTH LONGFELLOW FLINT is an eight-rowed, yellow flint variety, with ears from ten to fifteen inches long, 2 to 2½ inches in diameter, and well filled out to the extreme end of the cob. The cob is small and the kernel large and broad; ripens in eighty days. This corn is well adapted to the northwest. Has been grown in northern Minnesota and North Dakota for fifteen years with great success and complete satisfaction. Average season of maturity eighty days. Very prolific, having yielded 164 bushels of sound ears to the acre and has produced 194 bushels of ears to the acre in Vermont. Many stalks have two and very often three good ears. Stalks average seven to nine feet in height and make excellent fodder. Very few suckers.

PRICE POSTPAID: 1 lb., 35c; 7 lbs., \$1.60. Freight or express: Peck, \$2.00; 1 bu., \$6.50; 5 bu. or more, \$6.00 per bu. Our stock is shelled.

Mammoth (Early, 80 days) Longfellow Flint

Dibble's Mammoth Early Yellow Flint Corn

Dibble's Mammoth Early Flint

Each year from June 1st to September 1st our time is largely devoted to outside field work, looking after crops and seeds that are being grown for us under special contract, by special contract growers. At the same time, we are making every possible investigation and research—seeking facts and information as to improved and new varieties of seeds and plants of practical value for both the farmer and truck grower (the garden), as well as their general and special utility. By reason of this we have learned the experiences of all classes of farmers and others interested in agricultural pursuits, thus enabling us to help and assist many—very many of our customers in their selections (selections of seeds and varieties best adapted to their locality, latitude, climate, seasons and soils, etc.). When we can do this, or become helpful to our customers, it not only becomes our duty but it is one of the most pleasurable parts there is connected with our business, the seed business.

It was while in New York State, some eight or ten years ago, that we heard and learned much about "DIBBLE'S MAMMOTH EARLY YELLOW FLINT CORN," for owing to the shorter, cooler, corn growing seasons in Northern New York, and throughout the New England states, they require the very earliest dent varieties to mature there before frost. They also plant and grow a large part of their corn crops to the Flint varieties, they being much earlier to mature than the standard Dent varieties, such as is grown throughout the Central Western states and Corn Belt sections. But these latter sorts are grown quite extensively, specially for fodder and ensilage purposes.

It was while we were visiting in Northern New York that we found this Champion Mammoth Early Flint Corn, "DIBBLE'S MAMMOTH EARLY YELLOW FLINT." Everywhere grown it was extolled. Thus our attention was attracted to it, and after a careful, personal investigation, and upon the strength of this we went directly to the originator of this corn and purchased 10 bushels for our own planting, enough to plant 65 or 70 acres of land—seed selected and saved from his own private stock for seed purposes. This was how we got our start. Since then we have grown this greatly improved and superior variety more extensively than any of our Flint varieties, and as a matter of fact, sell more of it than we do of all our other varieties combined.

DESCRIPTION.—Briefly told, we believe this to be the earliest and best field variety of Flint corn grown—the largest and heaviest yielding, and as early as the earliest—ready for the knife in 65 to 70 days from planting and perfectly matured and hard in 75 to 80 days. The stalks average 8 to 12 feet in height; each stalk producing from one to three good ears, averaging from 10 to 15 inches in length, containing 8 rows on the cob and producing 100 to 200 bushels of ears per acre, and has been known to have given yields of 225 bushels of ears per acre and over in many fields.

Our seed of this variety, as well as all other of our Flint varieties, will be shipped shelled—but all hand selected—no ears shelled that run less than 10 inches long. We guarantee all our Flint varieties to show **GOOD, STRONG GERMINATION**, and if it does not so prove by test, it may be returned any time within 12 days from receipt at our expense and purchase price will be promptly refunded.

PRICE POSTPAID: Lb., 35c; 7 lbs., \$1.60. Freight or express: Peck, \$2.00; bu., \$6.50; 5 bu., or more, \$6.00 per bu. Our stock is all shelled.

Sandford's White Flint—Handsomest of All Flints

An 8-rowed white variety, with ears from ten to fifteen inches long, two to two and one-half inches in diameter, and well filled out to the extreme end of the cob. The cob is small and the kernel large and broad; ripens in seventy-five days. This corn is well adapted to the northwest, also in the east and New England states, and is said to have produced

200 bushels of ears to the acre in Massachusetts and other New England states. Has given excellent results in Minnesota, the Dakotas and other northern states. Excellent for ensilage. Stalks are very leafy, splendid for feeding green.

PRICE POSTPAID: Lb., 35c; 7 lbs., \$1.60. Freight or express: Peck, \$2.00; bu., \$6.50; 5 bu., or more, \$6.00 per bu. Our stock is all shelled.

Early Flint Varieties for Grain and Fodder Crop Combined

When it comes to Flint varieties for ensilage you want to quit looking after you have come to Dibble's Mammoth Yellow Flint. There is nothing grown—nothing ever offered that is better—none that equals it. First, it is as early as the earliest varieties—making itself in sixty-five to seventy-five days, corn weather. It grows stalks from 9 to 12 ft. high

and leaves or blades from tassel to ground, and both are very nutritious, and stock devour stalks and blades as readily as clover hay. It produces one, two and three ears from 10 to 15 inches long, and has been known to give a yield of 225 bushels of ears in the New England states, and almost as much in Minnesota and the Dakotas. It's the corn for fodder. It's the corn for ensilage and the best for everywhere.

OATS

PURE GENUINE ALBERTA, CANADA,
GROWN OATS

The New Alberta—What they Are

Like: The Biggest, Best and Grandest variety ever introduced into this country. A **BIG HEAVY YIELDING WHITE OAT.** The bordering on corner of this page is a correct illustration of kernels of these oats. You will notice they are a big, fat kernel, big enough to please anyone looking for something a little better than anything ever seen in the oat line, and an oat that weighs out from 44 to 50 pounds to the measured bushel and making a yield of 90 to 125 bushels to the acre. Ripen early for a large oat. Has a big strong, stiff straw, standing upon any kind of land, spangled head from 12 to 18 inches long, and some even longer.

We have had a thousand farmers write us, when ordering Seed Oats, that they would order enough of the new Alberta, Canada, grown oats to sow 25, 50 or 100 acres, if it were not for the price.

The facts are: The cost of the seed has nothing to do with it. Any investment that will give you two dollars for one is a good investment, whether it be for Seed Oats, Seed Corn, or a horse, hog, cow, or any other investment. We would be just as glad to sell you our Alberta, Canada, oats at market price as you would be to purchase them at that price if we could afford it. But when we have to employ a competent man to visit and inspect growing crops suitable for seed purposes before harvest and remain until threshed, and then loaded on cars at heavy expense; then pay freight from western Canada, 1,800 miles, also pay a premium price to start with, including other incidental expense, it is easy to see we cannot sell these oats at prices of home-grown oats. This being so manifestly plain, it is a question that solves itself. As proof of this we have sold more of these oats during the last five years than any of our other varieties. If you are going to change your seed, why not start with the very best, most improved varieties possible to obtain.

THE COST: The cost of seed is a secondary matter. It's a matter of yield, quantity results and profits on the investment. The cheapest seed oats you can buy costs you from 75 to 90 cents per bushel; they germinate 50 to 60 per cent and possibly, some, 75 per cent, or one-half to one-fourth chaff, hulls or seed that will never germinate; making a liberal allowance seldom ever yield over 40 bushels per acre; thus at best they would produce on 10 acres 400 bushels. Product at 40 cents per bushel brings you \$160.00. Suppose you sow 10 acres of our Alberta, Canada, Oats that germinate 100 per cent or close to it, every kernel starting off on a business mission, making a perfect stand, shading the ground with a big, robust growth and foliage that smothers the weeds and grass, and at harvest time produces 90 to 125 bushels per acre, or safely estimated, yields 800 bushels, every bushel weighing 44 to 50 lbs., per measured bushel, worth only 50 cents per bushel, total \$400.00, even for feeding purposes. But you are able to sell every bushel you raise to your neighbors for seed at \$1.00 per bushel, which means \$800.00 against \$160.00.

Get in shape to grow your own seed another year, and supply your neighbors with their seed. **SOW AT LEAST TEN ACRES OF THESE OATS THIS YEAR.**

We can confidently recommend these oats and assure all our customers that they will come up to your full expectations. In fact, out of the thousand bushels we have sent

E HAVE NEVER HAD ONE COMPLAINT OR DISAPPOINTED CUSTOMER.

PRICE POSTPAID: Lb., 30c; 8 lbs., \$1.50. Freight or express: Peck, 75c; Bu., \$2.00; 5 bu. or more, \$1.75 per bu.

The New Kherson Oats

Without a Spot. Without a Blemish. Without a Flaw.

The New Kherson Oats are without a comparison—the best Extra Early Oat that has ever been introduced into this country. Best in every respect. They are the earliest to ripen. They are the most productive. They are rustproof. They are of medium short, strong straw and stand up on the richest of land. They are not affected by dry weather, as other varieties are. They make themselves early in the season before dry weather sets in. They yield more per acre than any of the late varieties. They always make a certain crop, regardless of wet or dry weather, if your ground is properly prepared, as it should be for any kind of a crop, from mustard seed to the corn crop. Nothing but a hailstorm will prevent you from securing a 100-bushel per acre crop if you do your part.

We take the following description and tests from Bulletin 82 of the University of Nebraska, Prof. Taylor, Superintendent of Institute of Nebraska:

"This Oat has proven itself of such outstanding merit in tests at this station and among co-operative experimenters that it deserves special mention. The oat was obtained of the Kherson government, where the variety originated. A description of the soil and climate of that region will serve to explain why the Oats are so well adapted to this region, where they are raised without irrigation. The Kherson government of Russia lies in the Black Earth region, which is very similar to that of our own Great Plains. Climate is similar, also, but possesses even greater extremes of heat and cold, and is more uncertain as to rainfall."

"The plant is vigorous, but not a rank grower. The straw is short, and on the same land stands shorter than other Oats tested at this station. The leaves are very broad and expose a large surface. The panicles are spreading. The berries are light yellow in color; small, but numerous, and have a very thin hull. They usually weigh well per bushel; and in this respect, as well as in yield per acre, they have led all other varieties at this station."

PRICE POSTPAID: Lb., 25c; 8 lbs., \$1.40. Freight or express: Peck, 75c; bu., \$1.50; 5 bu. or more, \$1.25 per bu.

Big Banner 100-Bushel Oats

We believe among all that is good "BIG BANNER 100 BUSHEL WHITE OATS" to be the best American oats grown and equal or superior to any oats found in this country. They are big, plump and pretty. Grown side by side with other varieties they have frequently made a yield of 100 bushels per acre where any other varieties made but 35 to 40 bushels. Hundreds of our customers have written us that on account of their earliness, enormous yielding qualities, freedom from rust and wonderful stiff straw, standing up under wet weather conditions that caused other varieties to lodge and go down and that there was NONE LIKE BIG BANNER 100 Bushel White Oats. They undoubtedly stand pre-eminently at the head of all American grown OATS.

DESCRIPTION AND POINTS OF SUPERIORITY: First, these oats have a big, plump white kernel and thin hull. Its quick, strong, robust growth from the start. A shorter, stronger, heavier straw than any of the heavier yielding varieties. Its vigorous root system, enabling it to resist dry weather and drought. Its early ripening and maturity. Its freedom from rust, blight or smut. Its large kernels being solid and full of meat, almost as heavy as wheat, weighing out from 35 to 44 pounds per MEASURED BUSHEL, combining all the best points and qualities of all THE AMERICAN VARIETIES OF OATS IN EXISTENCE.

PRICE POSTPAID: Lb., 25c; 8 lbs., \$1.40. Freight or express: Peck, 75c; bu., \$1.50; 5 bu. or more, \$1.25 per bu.

Texas Red Rust-Proof Oats

The Best Oats for the South, and a Good One for the North, East or West.

Our Texas Red Rustproof Oats were originated in Grayson County, Texas, one of the central northern counties, abutting southern Oklahoma, some twenty years ago, where they, at first, made a most phenomenal record as being absolutely rustproof, as well as a marvelous yielding variety.

We can unqualifiedly recommend these Oats as being among the best of the best varieties for hardiness, productiveness, and as surest croppers under all conditions.

While we are not a knocker, we may be allowed to say that from reports that come to us, if true, more than 75 per cent of all the Texas Red Rustproof Oats sold for seed are more or less mixed with other varieties. With us, however, we have always been extremely careful in our seed crops, and our stock may be depended upon to be absolutely pure.

DESCRIPTION: The Texas Red Rustproof Oats are not a handsome oat to look at, but what they lack in beauty they abundantly make up in certainty of crop and yield. They grow to medium height, 3½ to 4 feet tall, have a sprangle head well filled with grains, often running 100 to 125 kernels to the head; also a splendid stooker. The grains or kernels are of a yellowish-red cast, with a husk extending well out over the tip ends, hence do not weigh out quite as heavy per measured bushel as some other varieties, but easily make up this difference in bushels. In brief, we can most heartily recommend these oats and their adaptability to any place where oats are grown, and especially recommend them to our Southern friends and customers.

Iowa No. 103 Oats

The Sweepstakes Oats at the International Dry Farming Congress of 1914 and 1915.

Iowa No. 103 Is a distinct new variety which originated at the Iowa Experiment Station. It was first sent out for trial four years ago to a select list of prominent farmers, including Hon. H. E. Krueger, Wisconsin's famous grain expert. Mr. Krueger named these oats "White Kherson" because they possessed so many of the characteristics of the Kherson, being just as early but white instead of yellow. He says of them: "They beat the Swedish Select 12 bushels per acre in 1913 and 28 bushels in 1914. They grow a short stiff straw so that every bundle is a mass of oats and we do not have to handle a lot of worthless straw." Mr. Krueger says they yielded 20 bushels more per acre than Wisconsin Pedigree No. 1, were two weeks earlier and were heavier, running three bushels per bag. This was in 1914. The past season, 1915, they yielded 108 bushels per acre on Mr. Krueger's farm and this was the average for 30 acres.

Mr. Krueger showed these oats at the Dry Farming Congress Exhibition at Wichita, Kansas, in 1914 and in 1915 and secured both years "First on White Oats, Opens to the World" and then "Sweepstakes" on all Oats.

Prof. Burnett of the Iowa Agricultural College says: "Iowa No. 103 is a 'pure line.' It is an early white oat that resembles the Kherson in its manner of growth. It has outyielded the Kherson both here at the Station and in the farmers' tests the last three seasons."

We consider ourselves fortunate in being able to offer these grand new oats. Wherever an extra early is needed or

Big Banner Oats.

PRICE POSTPAID: Lb., 25c; 8 lbs., \$1.40. Freight or express: Peck, 80c; bu., \$1.60; 5 bu. or more, \$1.40 per bu.

wherever the ground is rich and oats run to straw or fall to stand up, this variety will prove a great acquisition and will bring money to the farmer who sows it. We urge customers to buy liberally as we are sure they will not regret it.

PRICES OF IOWA No. 103: Price Postpaid: Lb., 25c; 8 lbs., \$1.40. Freight or express: Peck, 75c; bu., \$1.50; 5 bu. or more, \$1.35 per bu.

Regenerated Swedish Select Oats

Regenerated Swedish Select Oats originated with the Garton Seed Company of England. To "regenerate" is to make new, to re-create, and that is just what has been done by the Garton people. They chose Swedish as the "Best American Oat," and went to work to restore it to its original purity and vitality. They have done more than that. They have given us something ahead of the original Swedish Select. They have produced the finest oats in this country, heavy and plump and perfectly pure.

Now we have a stock of Regenerated Swedish Select to offer our customers that we believe is ahead of the English grown stock, because better adapted to American conditions.

This stock, grown away in the Northwest, is full of life and vigor and very fine. The oats are heavy, plump and bright, weighing 40 pounds per measured bushel, and are as fine looking as the original English stock. You can just as well increase your oat yield 25 to 100 per cent by using this seed. The three-kernelled feature, a very common thing with Regenerated Swedish is one reason for the splendid yields.

PRICE POSTPAID: Lb., 25c; 8 lbs., \$1.40. Freight or express: Peck, 75c; bu., \$1.60; 5 bu. or more, \$1.40 per bu.

Early Champion Oats

Early Champion Time tried, thoroughly tested and always a sure cropper. They are an old, well established and well known sort. Every farmer knows what to depend upon when he sows them, namely; they can always be relied upon for a large yield and a sure crop. In fact, the IOWA EXPERIMENTAL COLLEGE recommends them very highly as among the best yielders and the best for spring nurse crop to grass and clover. They grow a short, very stiff straw, always stand up well and ripen very early. Wallace's Farmer says: "We would rather risk growing grass with Early Champion and Kherson Oats than any other varieties known or grown." **PRICE POSTPAID:** Lb., 25c; 8 lbs., \$1.40. Freight or express: Peck, 75c; bu., \$1.50; 5 bu. or more, \$1.35 per bu.

Silver Mine Oats This Oat has a reputation as an exceedingly heavy and beautiful white kernels, which are especially desirable for the manufacture or rolled oats.

The heads are very large in proportion to the stiff, bright, clean straw. The sprangle top heads, although long, are borne low down on the stalk which seems to prevent lodging. The demand for this variety last season exhausted the supply and we suggest early orders to avoid disappointment.

PRICE POSTPAID: Lb., 25c; 8 lbs., \$1.40. Freight or express: Peck, 40c; bu., \$1.25; 5 bu. or more, \$1.10 per bu.

Giant White Hullless Barley

Hullless Barley No beards or hulls. The grain looks like wheat. Equal to wheat in feeding value, and yields twice as much. No barley has proved as valuable to the stock raiser as the White Hullless.

The yield varies according to soil and climatic conditions, but it can be depended upon to produce from 50 to 80 bushels an acre. Its nutritive value is very great. It is fed to work horses at the rate of two quarts where four quarts of oats would be required. The best way is to mix it with oats and grind or soak six hours in water for horse feed. It is also very valuable for feeding poultry, hogs and all kinds of stock. As fattening feed for hogs it has no equal. It makes sweeter meat and nicer lard by far than corn.

There is positively nothing that will give to your cattle better health and add to their weight quicker than feeding White Hullless Barley. Indeed, feeding them twice daily on White Hullless Barley and once on corn will add more fat and better fat and add it quicker and for less money than feeding on corn alone. We know this to be true, because we have demonstrated it repeatedly.

PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For peck or bushel prices, see Price List enclosed.

Speltz or Emmer

It's the Richest Stock Food That Grows

SPELTZ IS A CEREAL—A SMALL GRAIN CROP TO SOW. It has TEN THOUSAND POINTS IN ITS FAVOR AND NOT ONE BAD ONE—is good for everything any other cereal crops are. It's good for pasture; fattens in the green state. It makes the best of hay. It grows a 100 leafy stalk from one seed. It will grow anywhere that any other grain crop will. It's the greatest

drouth resister in the world, never affected by rains. It neither rusts, blights or lodges. It matures earlier than oats or spring wheat. It yields 10 to 20 bushels more per acre than oats; its equal to corn, barley, oats or rye as a food. Hogs squeal for it; cattle bawl for it, and horses neigh for it. One farmer said: "IF YOU SOW SPELTZ FIVE YEARS

YOU CAN WEAR DIAMONDS, and your wife CAN WEAR SILK AND SATIN, and when your friends come to visit you, you can take them out in an automobile. It's the richest crop ever planted. It yields enormously. It's the richest food out. We try every seed under the sun. Speltz surprised us; it completely captured us. (Continued on next page.)

What is Speltz? It's the Richest Stock Food That Grows—(Continued)

How nature takes care of man! Several years ago the fattening of hogs in the Dakotas, Montana and the North was thought impossible. Then came Beardless Barley, Speltz and Earliest Corns! These are the things that made it possible to fatten hogs anywhere on earth, and do it cheaper and better than with corn alone! Speltz is a richer food than corn. For fattening cattle and swine it is unapproachable. It cannot be beat. It fattens. It does this easily and well, and makes the best of pork and beef, and so cheaply! You can grow it anywhere; where wheat or oats will grow, Speltz will also thrive. Try it this year and be happy. Everything eats it and grows healthy, hearty and fat. It will surprise and please you. Try Speltz, Rape, Billion Dollar Grass, Sudan Grass, the wonder of the age, and Earliest Cane, and you have the greatest combination of foods for stock on earth."

Culture of Speltz is simplicity itself. It's sown in the spring in the North; in the winter and spring in the South. Prepare your ground as you would for wheat or oats and sow at the rate of two bushels or 80 lbs to the acre. Cut when in the milk and it will make a splendid hay crop. For grain crop cut when ripe and thresh same as other small grain. It is extremely hardy and can be sown earlier than spring wheat or oats, a light freeze or frost will not affect it. Speltz is one of the things we delight in urging you to sow. You will never regret it, when once you sow it. We have made our prices very low. We want every farmer who receives this catalog to try 10 or 20 bushels; the more, the better pleased you will be.

PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

Success Beardless Barley This is a new six-rowed barley, and as the name indicates, without beards, which is the most valuable improvement ever made on barley. It is a vigorous grower, producing strong, short straw and heavy, well filled heads. Its earliness is one of the most important features, as it can be cut and put out of the way before the wheat and oat crop is harvested. On good land it has produced 80 to 90 bushels per acre, and as much as 125 bushels in favorable seasons. In regard to soil, it is not particular, as a good crop of beardless barley can be raised on land too poor to produce a crop of wheat or oats. It is a first-class malting barley, and equally good for feeding stock, therefore always bringing the highest market price. It should not be mistaken for the beardless, hullless barley which is described on preceding page, and which is grown for feeding purposes only. Ever since this new barley was introduced, there has been such a demand for it that we were always short in supplying our trade, and we anticipate another great rush for it this year. **PRICE POSTPAID:** Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

Manshury Barley This grand barley was introduced from Asia by the Ontario Agricultural College several years ago, and is one of the most valuable varieties ever introduced into this country, greatly out-yielding the old renowned Manshury Barley. It is an early six-rowed variety, maturing in 80 to 90 days from time of sowing, and is adapted to all kinds of soil and climate; is very strong strawed, stools well, and bears large and well filled head of plump grain which possesses malting qualities of the highest order. Another important factor is its nice and bright color, which will not turn dull and yellow when exposed to rainy weather, as most other varieties do, and on this account it will always be in good demand by the brewers and commands the highest market price. A good malting barley always sells at least ten to fifteen cents more than discolored and which can only be used for feeding purposes. By growing the Manshury instead of some common variety, one can easily gain from \$5.00 to \$10.00 per acre. **PRICE POSTPAID:** Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List..

Oderbucker or Wisconsin No. 55 Barley

We presume that more barley is produced per acre in Wisconsin than any other locality. The reason for this is evident. In that state are located the largest breweries in the United States, if not in the world. On account of barley being one of the staple crops, the State Experiment Station of Wisconsin has given particular attention to the breeding of barley to obtain big yields. Qualities are essential for both brewing and feeding purposes. Oderbucker or Wisconsin No. 55 is considered the best variety of barley sent out by the Wisconsin Station. Prof. Moore declares it to be superior to Manshury, yielding 5 to 10 bushels more an acre. The original stock of this barley was obtained in Germany, by the Ontario Agricultural College, from which place the Wisconsin Experiment Station procured a small supply. By them it was disseminated. Oderbucker is a stiff-strawed, heavy yielding, six-rowed, bearded variety. It is the same as Manshury in time of maturity and general appearance, but has a plumper kernel and weighs more to the measured bushel. "In stiffness of straw and rust resistance it is superior to any other variety."

It has protein content nearly double the amount of protein found in many other varieties. This makes it a valuable feeding barley, which is an important consideration with the leading farmers and stockmen, who are now appreciating more the value of barley as a feed for all kinds of stock, horses as well as cattle. On account of its large percentage of protein, it is also one of the best malting barleys. **PRICE POSTPAID:** Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

Mammoth Spring Rye

I want to tell you something about Spring Rye, and that is: "It's a money maker in the fullest sense of the word! The yield is always big and the demand for same growing with each season. Mammoth Spring Rye would be ashamed of itself to yield less than 40 bushels per acre—and at that yield would make you 400 bushels."

This magnificent Rye is of recent introduction. It is distinctly different from Winter Rye, but can be successfully grown anywhere Winter Rye is grown and fills every requirement of Winter Rye, but should be sown only in the spring. It has proven to farmers a big money-maker and an easy money-maker, as good Spring Rye brought as good price as wheat and yielded from 10 to 20 bushels per acre more. We have but a few hundred bushels of this Rye, and we request

our customers to order early as it is the early bird that catches this Rye, as later on in the season it will surely be sold. It can be sown at the same time Spring Wheat is sown, at the rate of two bushels per acre, if sown alone, but it is much used as a forage crop and grown together with vetches and oats. It can be sown later than other spring grain and on that account it is much used as a catch crop where winter grain has been killed out.

Our seed is grown on our own farms and not bought in the open market; we can therefore vouch for it being Genuine Spring Rye. Many have been disappointed in receiving Winter Rye as a spring variety and we wish to emphasize the fact that we sell the genuine Spring Rye, sown in the spring and harvested the same season. **PRICE POSTPAID:** Lb., 30c; 3 lbs., 75c. For bushel prices, see Price List.

Success Beardless Barley.

Manshury Barley.

New Mammoth Wonder Winter White Rye

Mammoth Wonder White Rye We consider winter white rye one of the most important of all farm crops. In the first place, it is a sure crop, failures being unknown. Every farmer should have at least a few acres of it. It is sown in the corn, before the plows, at last plowing, also later, as late as November 1 in the fall, and as it grows vigorously will furnish pasture till late in the fall and early winter, also early in the spring before grasses have made a growth. So, it is of

great value to dairy farmers. If sown early in the spring it makes an early and abundant pasture, but makes no grain crop. Our Mammoth Wonder Rye is of extra quality. It will please you no matter whether you want it for pasture or grain. Grown for grain alone it will make money for you. Fifty bushels per acre have been procured.

PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

New Varieties of Spring Seed Wheat

The Cost Attached to the production and procuring of Pure High Grade Seed Wheat, including the cleaning and grading, and expense attached to it in preparation for "SEED" anyone who has not had experience cannot possibly appreciate the expense; therefore we are obliged to ask and sell our Seed Wheat at a considerable advance over market prices, marketed for milling purposes, which does not require absolutely pure varieties. Considering these facts, we believe that farmers who want to purchase and procure seed wheat, or want to make a change, will find it very

much to their advantage to purchase their Seed Wheat from us. We at least hope you will give us a trial.

Sow Only Pure-Bred Varieties All reliable authorities agree that pure bred seed produces from five to ten bushels better yield per acre under ordinary conditions than mixed or mongrel varieties, and it always commands from 5 to 15 cents per bushel more on the local market than mongrel sorts, simply because there is that much difference in the markets at the great milling centers.

Marquis Wheat, the King of All Spring Wheat

IT IS TEN DAYS EARLIER; PRODUCES 10 BUSHEL MORE PER ACRE; HAS A HIGHER MILLING AND BAKING QUALITY THAN ANY OTHER HARD SPRING WHEAT KNOWN TODAY.

The Wheat that won the \$1,000 prize at the New York Agricultural Exhibition for the best wheat grown on the continents of North and South America.

It combines all the qualities so earnestly sought after by the cerealist and devotedly hoped for by the grain growers of the West.

Origin Marquis Wheat was originated by Doctors Charles and William Saunders of the Central Experiment Station, Ottawa, Canada, by crossing the Red Fife and the Hard Calcutta, a native wheat of India which had become acclimated to northern conditions. The first experiments were conducted in 1886, but it was not until 1903 that it was fully developed. By scientific cross breeding a variety was produced that inherited the remarkable earliness of the Calcutta and the resistant and yielding qualities of the Red Fife. The original stock of seed was very small, but by careful husbandry the amount was gradually increased so that it might be disseminated throughout America.

A Prize Winner Marquis Wheat won the One Thousand Dollar Prize offered by Sir Thomas Shaughnessy for the best wheat in America, at the New York Grain Exposition in 1911. It also won the Three Thousand Dollar Prize at the International Dry Farming Congress at Lethbridge, Alberta, in October, 1912, in a competition open to the whole world. Marquis Wheat was again successful in winning the Sweepstakes prize at the Dry Farming Congress held at Tulsa, Okla., in 1913.

Earliness Marquis Wheat is ten days earlier than Red Fife, and this fact alone should induce our customers to grow it this spring.

Read what Mr. James Austin says about earliness and what it means to the wheat grower at a time when rust, smut, drought or hot winds may take his crop at any time. These ten days may save his entire crop from loss.

Productiveness Marquis Wheat has out-yielded all other Spring Wheats grown under the same conditions of soil, cultivation and climate. The increased yield varies from 5 to 10 bushels per acre. A five years' average yield at the Brandon Experiment Station was 44 bushels per acre.

Quality Marquis Wheat has by all milling tests shown a higher percentage of gluten, a better color, greater absorption and heavy weight per bushel of grain. This question of quality is of great importance to the wheat grower when he comes to dispose of his crop at the mill or elevator. Almost without exception, Marquis Wheat will grade No. 1 hard.

Appearance Marquis Wheat is similar in appearance to Red Fife, but the heads, as a rule, are heavier and the straw shorter, making it less likely to lodge. The kernel is flinty, a little darker in color than Red Fife, being dark red, and more plump than that variety. It is beardless, having smooth, yellow chaff. It weighs from 64 to 66 lbs., to the measured bushel.

Canadian Grown The seed we offer this year was raised in Canada on new land. Being raised in the far north, this wheat has all the inherited tendencies of that locality, earliness, hardness and productiveness.

Price We have made the prices reasonable. Considering the increased yield, finer quality and earliness of Marquis Wheat, the first cost of the seed is returned many times over in the additional value which may be secured for the crop.

PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

Macaroni, or Durum Wheat

GREAT YIELDS: ONE FARMER GETS 71 BU. PER ACRE; ANOTHER 62 AND ANOTHER 52.

Macaroni Spring Wheat Grand Macaroni. The wheat that defies rust, that fearful scourge. The wheat defying all climatic conditions, disease, insects and rust, everything; a yield bordering on the marvelous. A Great Drought Resister; Rustproof. Sent out by the United States Department of Agriculture, under strong recommendation as to its great value for semi-arid lands where good crops of spring wheat cannot be grown or produced under ordinary conditions, and it has more than justified every claim made for it. Yields 50 percent greater than any other variety of wheat. Many farmers report enormous yields. One writes: "I obtained 62 bushels to the acre, another 71, another 52, another 48 and another 49." It is always a sure cropper everywhere and will mature in a shorter period than any other variety of spring wheat. It is especially adapted to the Dakotas, Minnesota, Iowa, Nebraska, Colorado, New Mexico, Kansas, Oklahoma, Texas, and Arizona. It does well on poor land and gives enormous yields on good soil. The grain is very hard and closely woven, translucent, and rather large.

Heads bearded, compactly formed and well filled. It should be sown as early in the spring as conditions will permit.

This Wheat especially comes into play in the dry, arid, hot regions of the United States. Take the Dakotas and Western Nebraska and Kansas and Colorado and Montana and Arizona, Wyoming and Texas—in fact, in any of these states and every other state of the Union, this Wheat can be grown and will return yields far beyond the average spring or winter Wheat known today. On our lands we have repeatedly had from 40 to 60 bushels per acre. It does magnificently in Texas and a large number of our customers have grown it in that state. In Dakota and other states, where it has been grown in Russian settlement for 12 or 15 years, also in Nebraska and other western states, it is ground in the local custom mills for flour, and no other will be used when once tried. It is a wheat that gets along with less moisture than any we know of, and the yield is always good. It will do well in any state of the Union, though it is best adapted to soils rich in humus and containing a good

(Continued on Next Page.)

Macaroni Spring Wheat—Remarkably Productive, Early, Unexcelled—(Continued)

portion of potash, phosphate and lime. The U. S. Department of Agriculture says that the Macaroni Wheat stands foremost among all wheat groups in its excellent adaptation to regions of intense heat and drought.

The straw is strong, seldom troubled with insects and diseases that affect other wheats. Rust is also unknown on Macaroni Wheat; it is indeed the only wheat that defies anything, diseases, insects, unfavorable climatic conditions, and gives a yield that astonishes everybody, bordering on the marvelous. Macaroni is a very hard wheat and when it was first begun to be grown in this country the big mills of the country discriminated against it, because they could not get enough to justify a grind, but since the wheat is being grown extensively all over the wheat growing districts of the country, the big mills are anxious to obtain it in preference to hard Minnesota spring wheat, and it now commands a premium of 5c to 10c per bushel above No. 1 Minnesota

hard spring wheat, and even reached the price of 18c per bushel over No. 1 Minnesota hard wheat; during the winter of 1915, at Omaha, Minneapolis and Chicago, and the demand became so great for pure varieties for seed purposes that seedsmen were compelled to advance their prices for seed to \$3.25 to \$3.50 per bushel. It is a sure cropper and a great money-maker everywhere.

Macaroni Wheat has compactly formed bearded heads; the grain is large, hard and glossy, of yellowish color, often translucent. The grain being large and not stooing very heavily, 1½ to 2 bushels are required to sow per acre. There are many kinds of Macaroni Wheat, only few possessing good milling qualities. Kubanka No. 5639 is the richest in gluten, and wheat of this variety sells in the milling markets at a premium over and above No. 1 hard spring wheat.

PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

Iowa Chief This variety of spring wheat has been selected and bred by us and our seed stock grown under our own supervision until it has attained such a high standard and quality we feel justified in giving it a distinct name. All who have seen this wheat, both the grain and the crops, compliment us on its superior quality and yield. It is as nearly pure as wheat can be and by cross breeding we have produced one of the most vigorous strains of spring wheat we have ever seen, which goes far in increasing the yield, its early maturity and reducing the damage by rust, bugs and storms. It is a hard bearded variety, the kind that produces the best milling wheat and finest flour that can be made, as well as the most pounds of flour to the bushel. In addition to this, it is adapted to any locality where spring wheat is grown.

PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

Big Red Fife Spring Wheat This is the wheat used in the Orange Judd Farmer contest of 1905, and is stock selected by Prof. Shaw and the Orange Judd Farmer and American Agriculturist as being the purest and healthiest stock of hard wheat to be obtained anywhere at any price. It is the wheat that made Minneapolis flour famous and is undoubtedly one of the finest stock of milling wheat in existence. **PRICE:** Same as Iowa Chief.

Minnesota No. 163 Fife Wheat Of the many crosses obtained within the past twelve years, the one sent out by the station as Minnesota No. 163 takes a high rank. The heads are long, well filled with medium sized, plump kernels. Flour made from this variety shows a higher gluten test than most sorts. The straw is medium height, very strong and wiry. At the station farm this variety averaged two to five bushels an acre more than the Fife and Blue Stem varieties. The average yield of Minnesota No. 163 Wheat for the past thirteen years has been 26.4 bushels an acre. This tells a story which should interest every intelligent grower of spring wheat. Our crop was grown in North Dakota on land which had not grown wheat for a number of years, and is pure. **PRICE:** Same as Iowa Chief.

Minnesota No. 169 Blue Stem Wheat In this we offer the second new wheat originated at the Experiment Station. It is a progeny of Haynes' Blue Stem. Its average yield for four years as compared with the parent variety, is given by the Experiment Station as follows: Haynes' Blue Stem, 22.5 bushels an acre; Minnesota No. 169, 28.3 bushels an acre.

This comparison with its parent, which is a superior variety, tells the whole story as to yield. This is the best Blue Stem Wheat of which we have knowledge. It has given an average yield during 14 years, through favorable and unfavorable seasons, of 26.7 bushels an acre. No better wheat for Minnesota and the Dakotas is grown. In quality it proved in milling tests equal to the best. This variety has no beards.

PRICE: Same as Iowa Chief.

OUR VARIETIES OF WHEAT ARE THE MOST PROLIFIC AND THE QUALITY OF THE SEED EXTRA CHOICE. THEY WILL ANY OF THEM PLEASE AND PAY YOU TO SOW.

Hardy Northern Grown Winter Seed Wheat

Iowa Chief Spring Wheat

A Photograph of an 80-acre field of Malakoff Wheat, yielding 62 bu. to the acre, grown in 1912 by John McLaren, Fremont County, Iowa. Another Fremont County farmer grew 1,192 bu. on 20 acres, same year; average, 59½ bu.

"Malakoff," "Turkey Red," hard bearded; "Fultz" and "Minnesota Red Cross," soft beardless. Four hardiest, heaviest yielding and surest croppers grown, best for the North, South, East and West.

Write for prices on Winter Wheat after July 1st.

Buckwheat---Superior Varieties

This is Larger than the Common Variety.

New Calcutta Buckwheat

ness, yielding as high as 75 bushels per acre. Its kernels are smooth and fine, and it is in great demand as a milling buckwheat.

PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

Successful Catch Crops---Dry Weather Crops.

"Feterita Early" Drought Proof, Sure

Crops, Catch Crops, Dry Weather Crops and Sure Crops; crops that can be depended upon for grain, feed and forage under almost any conditions, a number of them that can be planted very late, in June, July, August, and some as late as September, especially in the South. A number of them can be planted or sown after small grain is cut and taken off the ground, also after such crops as early Corn, Potatoes and such like. Rye can be sown in front of the plows at last plowing and will make an abundance of the most valuable fall pasture. But we wish more especially to draw attention to the different Sure Crop, Feed and Forage Crops listed and described on this and the following pages. Also other valuable and profitable crops listed and described for late planting.

Feterita

This is a combination grain and forage plant introduced into the United States only a few years ago from the Sudan region in Central Africa. Feterita has now been thoroughly tried out in every part of the United States and proven to be the best and most valuable combination grain and forage plant ever introduced into this country, especially in localities subject to drought, but does well everywhere; in every region and every climate. It grows 6 to 9 feet high. It is planted and cultivated similar to Corn or Maize. However, we consider this a much more valuable crop than Maize. It is from 15 to 20 days earlier than Maize, makes 15 to 30 bushels more per acre, and the forage is far superior to either Maize or Corn. The stalk is slender and the sap is sweet like sorghum (sugar cane), and makes excellent forage. Feterita has proven to be the greatest

PENCILARIA

HARVEST WINTER WHEAT OR RYE AND SOW BUCKWHEAT. GET TWO CROPS IN ONE SEASON.

Buckwheat

Is a "catch crop," easily grown between regular succession crops. Also valuable as a weed exterminator and green manure. It will grow best on light soil, and it will flourish under greater rainfall than other grains. As a second crop Buckwheat cannot be surpassed.

New Giant Japanese Buckwheat

We want to urge and beg farmers to plant more buckwheat. It pays, it pays handsomely. Buckwheat will even do well on lands low in nitrogen. Buckwheat pays everywhere, on any kind of soil, rich or poor. Try it this summer. The famous distinct variety. Entirely distinct from all other varieties. It has the advantage of remaining for some time in bloom and produces seed earlier. On this account it can be grown farther north. It resists drought and blight. The seed is rich dark brown in color and larger than Silver Hull. As much as 60 bushels to the acre have been harvested of this variety, making it very profitable to raise.

PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

Silver Hull Buckwheat

This valuable variety is a decided improvement on the old black or gray sort. It is early, remains longer in bloom than other sorts. A fine variety for honey bees. The grain is of a beautiful light gray color and has a thin husk. Millers prefer Silver Hull, there being less waste and it makes whiter, better and more nutritious flour than other varieties. Silver Hull is more productive and the grain meets with a more ready sale, bringing higher prices than the Japanese. Under favorable conditions it will yield 40 to 50 bushels an acre.

PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

This variety comes from India and rivals the celebrated Japanese Buckwheat in productive

Its kernels are smooth and fine, and it

Feterita

drought resister, except, possibly Sudan Grass, of all the sorghum family, making good grain and forage even when Maize and Kafir and other crops failed. The grain is about three times as large as Kafir and is pure white. It grows even in height and is the prettiest crop we have ever seen growing. It needs no fertilization, but will make paying crops on land too poor to make corn or other crops. Yet it is not indifferent to good soil. We have a choice lot of seed Feterita this year, grown from our own crops here, especially selected and recleaned, and want every farmer who has stock or poultry to try a few acres of it. It will not disappoint your best expectations. It's one of the best poultry foods there is grown. PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

Pencilaria

A WONDERFUL FODDER PLANT. A new fodder plant of untold value. To the farmer for its immense growth of hay; for its excellent fodder; for its quick growing foliage. It is a native of Central America. It is an annual plant, having broad foliage, very much resembling corn leaves. If cut as soon as it reaches the height of 2 or 3 feet can be mowed from 4 to 6 times, according to the latitude. If allowed to grow 12 or 13 feet high and cut when the flower heads begin to develop it will yield the heaviest fodder crop per acre of any plant now in cultivation. For feeding it is equal to any fodder, and is relished by any kind of stock, either dry or green.

Enormous Grower

It should be planted 6 inches apart in the row and the rows about 3½ feet apart. Cultivate two or three times if possible, and by that time the sight will astonish the beholder, and you will marvel at its luxuriance, and your wonder will but then begin. It will average 40 rich, juicy, leafy stalks to the plant. Sow as early as you would Indian Corn. The usual way of growing it, however, is to mow when 3 to 6 feet high, and it will immediately start again and can be mowed 4 to 6 times during the season. Every farmer everyone who keeps cows, horses and hogs, should try it. Sow in drills 6 to 6 pounds, or broadcast 8 pounds per acre.

PRICE POSTPAID: Lb., 25c; 3 lbs., 60c. For bushel prices, see Price List.

Sudan Grass

HAS EVERY OTHER FORAGE PLANT BACKED OFF THE TRACK.

Sudan Grass is the wonder of the age. It is the greatest forage plant ever introduced by the United States Department of Agriculture. It seems to have taken the country by storm.

Extract from United States Department of Agriculture, Bureau of Plant Industry's Bulletin:

The Origin of the Seed In the year of 1909 a small amount of this seed was brought into this country from Sudan, Egypt, by the United States Department of Agriculture. It has been thoroughly tested since its introduction, in many sections of the United States, everywhere a success.

"Sudan is probably the wild original form of the cultivated sorghums. It is a tall, annual grass, growing under favorable conditions to a height of 6 to 10 feet, but when broadcasted thickly, it grows only 4 to 6 feet high. The stems are fine, the largest stalks seldom larger than a lead pencil. Where the plants are scattered, they stool abundantly, as many as 100 to 150 stalks coming from a single root. In general appearance, Sudan Grass is very much like Johnson Grass, but they are entirely distinct, for Sudan Grass lacks root stalks and, therefore, never becomes troublesome as a weed. The stems are leafy, erect, and seldom lodging. The grass cures easily, making hay of excellent quality, which is readily eaten by all kinds of live stock. It has been grown with marked success throughout the semi-arid regions, maturing seed even in South Dakota. It grows well through the humid regions, and from Central Missouri southward, will ordinarily yield two and three cuttings of hay in a season. It is considerably earlier than the earliest Amber Sorghum and will mature as far north as the Canadian line."

"Growing the Crop It may be grown either drilled, in cultivated rows, or broadcasted. If planted in cultivated rows, the rows should be as close as possible, and yet permit of easy cultivation. In 24 to 30 inch rows, 2 to 3 lbs. of seed per acre is ample; and, under conditions of very low rainfall, this method is recommended. Under humid conditions, 18 inch rows are preferable, and 5 lbs. of seed per acre are sufficient. For drilling or broadcasted, 15 lbs. of seed per acre should be used. The seed should not be sown until the ground is warm, that is, about the time for planting corn. The young plants will withstand slight frosts without injury."

"Harvesting the Crop The hay should be cut as soon as the grass is fully headed, and early cutting is especially advisable where two or more cuttings per season are expected. The grass can be cut with a mower, but more conveniently with a binder, especially in dry regions, as the hay cures very readily in bundles."

"Saving the Seed The grass yields a heavy crop of seed, especially in cultivated rows. If the seed is grown for commercial purposes, it is highly important that it be grown on land not infested with Johnson Grass, as the seeds of the two are distinguishable only with difficulty. It is recommended that, in growing for seed only, it be cultivated in rows, taking great care to hoe out and eliminate any Johnson Grass or other weeds, etc., that may show in the Sudan Grass. It crosses very readily with all the cultivated varieties of Sorghum, and when it is grown near any such variety, more or less numerous hybrid plants will appear in the progeny. These hybrids do not harm in fields intended for hay, but where a crop is to be harvested for seed, the hybrid plants should be rogued out. This should be done preferably as soon as the hybrids appear in bloom, so as to prevent further crossing in the field, but in any event, it should be done before the Sudan Grass is harvested. The Sudan Seed weighs about 32 lbs. to the bushel."

Sudan Grass WITHOUT DOUBT HAS SOLVED THE HAY QUESTION. THE GREATEST DROUGHT RESISTANT FORAGE CROP KNOWN. At the same time it does not blight where the moisture is heavy, and under good seasonable conditions it yields a larger tonnage of hay per acre than any other crop known. It recovers rapidly after cutting and the next crop is usually ready for harvest within thirty days from the first cutting. Sudan Grass has solved the hay question wherever grown. Farmers are looking for a crop with both a feeding value and a market value. This country has never produced enough hay. Good hay always brings splendid returns. Hay is the best forage and the most convenient to handle. Sudan Grass is a great producing crop, both in quality and yield, makes a nutritious and palatable hay which is greatly relished by cattle, horses and other farm stock. In feeding value the hay is second to Alfalfa and far better than Millet, which is usually grown as a catch crop. Its yield is also much larger than Millet.

Sudan Grass has everything in the way of forage crop we have ever seen backed clear off the boards.

PRICE POSTPAID: Lb., 35c; 3 lbs., 90c. For bulk prices, see Price List.

Successful and Valuable Money Making and Money Saving Crops

Money Saving Crops The crops on the farm may be divided into two classes, the money making and the money saving crops. The real need the farmer is not only the money making crops, but the money saving crops. The vital proposition is the production of those crops that will make and save the most money and give the best and most profitable returns, whether it saves or makes you money. A dollar saved by planting money saving crops is like the old saying, "One bird in the hand is worth two in the bush."

The United States Department of Agriculture states that in 1913, when conditions were unusually severe, the following yields per acre were recorded:

Eastern South Dakota and Southern Minnesota, 4½ to 5 tons. Maryland and Virginia, 2 to 3½ tons.

Eastern Colorado and Northern Texas, 1½ to 2¼ tons. Tennessee and Mississippi, 2 to 5½ tons, etc.

These yields were made without irrigation. When irrigated the crops were from 8 to 9 tons and over, per acre. The yield of seed is on dry land from 500 to 1,000 lbs., but on irrigated land as much as 2,550 lbs. have been grown per acre. Sudan Grass crosses quite easily with other cultivated sorghums and Johnson Grass, but our seed has been grown in the North, where no Johnson Grass is grown, and our fields have been kept far apart from any other Sorghums. We can assure our customers, therefore, of the high quality of our Sudan Seed.

We are now cutting three tons and over of excellent hay to the acre from seed planted the first of June, which had not more than 2 inches of rain all told. It is six feet high and is as fine as one could wish for.

A. M. AUGUSTINE,

Sec'y, Ill. State Horticultural Society.

Successful Annual Forage Plants

Teosinte "This plant affords opportunity for one to make millions of blades of grass grow where none of any account grew before." This is what Prof. Asa Gray said of Teosinte. The plant came to us from the fertile plains of the Nile, where travelers tell us the enormous yields of 300 tons of green fodder per acre is not uncommon. Here in America, too, its yields have been marvelous. It has always given the heaviest yields of any of the forage crops grown. It is a remarkably vigorous grower, reaching 12 to 18 feet in height, with an unusual supply of leaves and tender stems. Quite often a single kernel will produce as much as 60 to 100 stalks. If cut when it reaches 4 to 5 feet in height it makes excellent fodder and will produce a second crop fully as large as the first. The stalks contain from 8 to 10 per cent of sugar.

CULTURE OF TEOSINTE: Plant in hills four to five feet apart each way about corn planting time, and cultivate like corn. It will soon look like a dense forest. Makes a magnificent fodder for cattle during the winter months. Give it a trial. It will more than pay you; grow it for your cattle and hogs. You will be surprised what a tremendous amount of fodder you will get off an acre.

PRICE POSTPAID: ½ lb., 90c; lb., \$1.50; 5 lbs. or more, \$1.35 per lb.

Teosinte.

Jerusalem Corn.

Jerusalem Corn This non-saccharine sorghum is one of the best and surest grain crops for dry countries and seasons. It grows about 3 feet high and makes one large main head and several smaller ones. The grain is pure white and a good food for man or beast. Use 3 pounds of seed per acre.

Price Postpaid: Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Yellow Milo Maize A non-saccharine sorghum of high value; cultivated like corn. It is a vigorous grower, of deep green color, attaining a height of 8 or 10 feet. Some stalks develop 20 heads. The seed is fed to horses, cattle, chickens, etc. It will mature its main head in 100 days and will continue growing until frost. Plant four to five pounds per acre.

PRICE POSTPAID: Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Kaffir Corn Is a most excellent fodder plant. It grows from 6 to 8 ft. high, making a straight, upright growth. The stem or stalk bears numerous wide leaves. The stalks keep green and are brittle and juicy, making excellent fodder, either green or dried. The seed crop is also heavy, sometimes yielding 60 bushels to the acre. There is no failure about this, as it possesses the quality that all the tribe possess of going without rain without any loss of capacity or yield. The grain is extremely valuable for poultry. Cultivated the same as corn, requiring 5 pounds of seed per acre. For fodder sow one-half to one bushel, either broadcast or in drills.

PRICE POSTPAID: Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Milo Maize.

Sorghum—(Cane) EXTRA EARLY SORGHUMS, THE SWEETEST, THE LEAFIEST, THE HEAVIEST YIELDING.

The possibilities of Earliest Cane are almost beyond comprehension. Growing it for ensilage has become an established part of American agriculture and stock raising. It is one of the very few types that meet the highest expectations.

To the utmost vigilance and mature deliberation of practical farmers in the selecting of the most prolific types can be attributed the great popularity of Sorghum, as experience has demonstrated to a mathematical certainty that it is vastly superior to any other.

It can be grown to perfection everywhere. In Texas and Manitoba, in Maine and California. There is nothing so good in the Sweet Sorghum Line as Cane for quick fodder. Sheep relish it, hogs grow fat on it, cattle glory in it, horses will jump a wire fence to get into it, chickens, and in fact, everything living on the farm is fond of it.

For soiling or green feeding Cane is of a very high value, especially during the summer and autumn when the pastures are dry and it is hard to find sufficient fodder to keep the animals in a thrifty condition. It is one of the best foods that can be used to feed growing animals and also the dairy cattle on account of the flow of excellent milk which it will produce. An acre of Cane often produces as much as 40 tons of green fodder, but the average yield is probably only 20 tons.

Cane makes a grand summer pasture for all kinds of stock, especially for sheep and hogs. When used before it heads out. The hay is very nutritious and is relished by all kinds of stock, including hogs. The yield of cured hay is about 12 to 15 tons per acre. Cut when heading out, leave for two or three days on the ground and then put up in shocks. The Silage made of Cane is exceptionally nutritious. It is best cut for silage when the seeds begin to harden, as, if cut in too immature condition it is liable to become sour. Cow Peas and Soy Beans are quite often mixed with cane for the silo. This will greatly increase the feeding value. As a catch crop Cane is frequently used. It can be sown in mid-summer after an early grain crop or can be planted in place of other crops if they have been destroyed by hail, flood or insects.

PRICE POSTPAID: Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Orange Sorghum (Cane) Two to three weeks later than Earliest Cane, growing taller, producing heavier stalks and more abundant leaves. It is always in big demand.

PRICE POSTPAID: Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Kaffir Corn.

Earliest Amber Cane.

"Billion Dollar Grass"

ESPECIALLY VALUABLE FOR SILO AND FOR FEEDING GREEN—BETTER THAN THE BEST CORN FODDER.

From Japan, that mysterious country, which is furnishing (and has furnished in the past) many rare farm seeds, comes this remarkable grass—remarkable in a hundred different ways, for there is nothing known to man today that is more luxuriant, more prolific, more marvelously rich and vigorous in growth than Billion Dollar Grass. It will produce a hay crop in from six to ten weeks, anywhere, and if sown the first of May it will be ready to cut the middle of July for hay, attaining the height of (according to the richness of the soil and warmth) from 5 to 7½ feet. It is pre-eminently the grass to sow if you are going to be short on hay for your horses, mules, cattle and other stock.

BETTER THAN CORN FOR SILO.—Cows with both Billion Dollar Grass and corn before them will take Billion Dollar Grass first and consume it without waste; when put upon Billion Dollar Grass they increase in milk and fall off when feed is changed to corn. An ideal ensilage mixture is made of two parts Billion Dollar Grass and one part of Soya Beans, or Cow Peas, mixed when filling the silo. This mixture forms a complete balance ration for milch cows without grain, oil cake, etc.

CULTURE.—Everybody reading the above regarding this wonderful grass will wish to know its best method of cultivation. If you wish very fine, leafy hay, and have strong, rich ground, sow at the rate of twenty pounds per acre, but if your soil is but moderately rich, then sow at the rate of fifteen pounds per acre. This latter is the amount we ourselves sow, and find same very satisfactory. It can be sown at different times of the year; especially if you wish same for pasturage, or if you are short of hay. It can be sown in April, in May, in June, in July, and even in August, and will return glorious, heavy crops.

FEEDING VALUE.—Here is where Billion Dollar Grass comes into play. Prof. Williams of the United States Department of Agriculture says: "Already widely grown as a hay crop, it deserves more general use for soiling, as this grass is of particular value for feeding to dairy cattle, young stock and sheep."

FOR FEEDING GREEN: All rich, luxuriant growing grasses and forage plants must be fed in the green state moderately at first. Billion Dollar Grass is one of those rich, magnificently luxuriant growing grasses; therefore you should turn in hogs and cattle and sheep and horses at first moderately, after they have had a good feed somewhere else, and then gradually accustom them to this. It is on the same plan as hungry stock turned into rich clover; they would find harm. Turn them in at first moderately, and you can soon keep them in permanently.

FOR SEED: Let Billion Dollar Grass get thoroughly ripe; cut and thresh as you would timothy. The seed is rich and nutritious. Poultry, geese and turkeys all relish Billion Dollar Grass in the green state, and keep healthy and fresh on the seed thereof when fed during the fall and winter months.

Hogs and their families. The hogs grunt and give that contented swag of the tail when they can pasture on Billion Dollar Grass, and then if you wish to fatten them, give them rations of the seed. Remember, this grass will produce from forty to sixty bushels of seed per acre. This fed, either

Billion Dollar Grass.

ground or coarse, makes excellent food, although it is inclined to be slightly laxative.

Cows, calves and other stock look with pleasure on the Billion Dollar Grass pasture and feed in contentment upon its luxuriant swath and glory in Billion Dollar Grass hay, especially if fed along with Cow Pea Hay or Pea Oat Hay or grain. Try it this season to make hay out of it, fill your silos therewith and watch the cattle eat it.

Horses, mules and the like jump over a four-foot fence to get at the Billion Dollar Grass, and they will fatten and keep healthy thereon. They will eat the hay as eagerly as cattle.

A REMARKABLE GROWER.—It is truly the most marvelous grower, the most luxuriant stoolet that we have ever seen. Imagine a field sown to Billion Dollar Grass, with every spear of it over 6 feet tall, yielding from 26,000 to 50,000 pounds of as rich, green fodder as the world has ever seen. Men talk about hard times, but positively hard times must vanish on every farm where Billion Dollar Grass is sown. You can get two or three rich crops from the same annually; and then a big lot of fodder besides. If you sow early you will get from 26,000 to 50,000 pounds of fodder, which you can put in your silo or cure for hay. Billion Dollar Grass will quickly spring up again and give you another yield that will astonish the country. This can be cut again for hay; then the field will give you a pasture all fall, and horses and hogs and sheep and cattle and poultry will eat it greedily.

PRICE POSTPAID: 1 lb., 25c; 3 lbs., 60c. For bulk prices, see Price List.

Dwarf Essex Rape

THE MOST PROFITABLE PASTURE PLANT IN EXISTENCE.

RING THE BELLS; stand aside and make room on every farm for a few acres of Dwarf Essex Rape, the most profitable pasture crop or plant in existence. Yes, come here, Mr. Farmer until we tell you about it.

ONE ACRE of Dwarf Essex Rape will pasture more hogs, cattle and sheep than six acres of grass or clover. As a healthy, fattening pasture food it has no equal. It stands without a rival in cheapness and effectiveness.

It is an annual, bearing a close resemblance in leaf and stalk to the Rutabaga, but both leaves and stalk are more numerous in the Rape plant, and of a taller habit of growth. It is a pasture plant which may be eaten off by any kind of live stock, but it is pre-eminently fitted to furnish pasture for sheep, cattle and swine.

A good crop will furnish at least 12 tons of green food, and its nutritive value is twice that of clover an acre. One acre of well grown Rape will furnish pasture for twenty head of sheep for two months, and will fatten them in good form for market. Dwarf Essex Rape thrives best on a good soil, rich in vegetable matter. Slough lands are excellent. This plant may be grown successfully in the following ways, viz.: 1. In the early spring to provide pasture. 2. In June or July, on well prepared land to provide pasture. 3. Along with grain, using 5 lbs. of seed an acre, to provide pasture for sheep after harvest. 4. Along with peas, oats, clover seed, to provide pasture to get a "catch" of clover. 5. As a cover.

PRICE POSTPAID: 1 lb., 35c; 5 lbs. (will sow an acre), \$1.40. For bulk prices, see Price List.

Oriental Grass an Annual Forage, Fodder and Feed Crop—The King of All: Yields 15 Tons to the Acre.

Oriental Grass MORE NUTRITIOUS THAN OATS, CORN OR ENSILAGE.. A new grass, imported from the sunny isles of Japan. Our attention was first called to this grass by Japanese authorities who recommended it very highly for feeding dairy cattle, young stock and sheep, it being very rich in protein and nutritious element.

At our farms it has proven a wonderful success as a forage plant and far beyond our best expectations, producing, at the rate of 50 bushels of seed, 30,000 lbs. of green fodder, 10,000 lbs. straw, 11,000 lbs. hay to the acre, and has proven equal to alfalfa hay and superior to corn fodder or ensilage or oats for feeding milch cows and other stock. If sown in the South, Oklahoma, Texas, Louisiana, Mississippi and that latitude the last of April it will be ready to cut for hay the middle of July. In the North, in Iowa, Nebraska, Illinois and other northern states, it should not be sown until about May 15, dependent on the seasons and latitude where sown. It attains a height of 5 to 8 feet, according to the season, and when desired for hay should be cut when the heads begin to appear and before the seeds begin to form. Sown broadcast requires 18 to 20 lbs.; drilled, 12 to 16 lbs. to the acre. **PRICE POSTPAID:** Lb., 25c; 3 lbs., 65c. For bulk prices see Price List.

Shallu A NON-SACCHARINE SORGHUM FROM INDIA. Producing very large yields of both grain and fodder on account of its stooing habit, 3 to 6 stalks are produced from a single grain. The stalks do not harden, as do other fodder crops, but keep green, brittle and juicy. A most excellent fodder, either green or dry, being highly relished by all stock. It forms a large head, similar to broom corn, with round, plump white seeds, and has proven an excellent feed for horses, cattle and chickens. It makes an excellent flour for pancakes. Does well everywhere. Should be sown in rows 3 feet apart, 3 to 5 lbs. to the acre. For fodder sow 25 to 50 lbs., either broadcast or in drills.

PRICE POSTPAID: Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

German Millet (True Southern Grown Seed.) In the North, Millet is sown almost altogether for hay, and for that purpose Southern grown seed is best. It grows taller than that from Northern seed, and that means more hay. It is finer than that from Northern seed, and that means better hay. In fact, from the standpoint of profit, a farmer had better pay \$2 50 a bushel for the true Southern grown German Millet than to sow the best Northern Millet as a gift. Millet seed produced in the North, even from Southern seed, becomes what we call Common Millet. Not only does the plant change in character, becoming coarser and much more dwarf, but the seed itself shows a change, and is readily distinguished by those experienced in handling it. We wish to say that any Millet seed offered and shipped by us as Southern Grown Seed, can be relied upon to be genuine stock, true to name. About three-fourths of a bushel of seed is sown. It is tender if cut when it is in full bloom. A yield of five tons of hay per acre is nothing unusual.

PRICE POSTPAID: Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Northern Grown German Millet This grows very rank and is one of the best varieties for hay or fodder. On good, rich soil it will make a growth of 4 to 5 feet high, and although the hay may seem coarse, yet it is so tender that if cut at the right stage, which is when in full bloom, even the hogs will eat the cured hay quite greedily. A good yield is from 3 to 5 tons of hay to the acre. Sow three pecks per acre. **PRICE POSTPAID:** Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Siberian Millet A fine variety from Russia, earlier than either German Millet or Hungarian, and consequently very valuable for the North and yields remarkably. It is extremely hardy, withstanding drought wonderfully, and is about two weeks earlier than the German Millet. The plant stood to as many as thirty to forty stalks from one seed, and is not subject to rust. **PRICE POSTPAID:** Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Japanese Millet was first grown in this country by Prof. Brooks, of the Massachusetts Agricultural College, who brought it from Japan. It has proven very valuable and is highly recommended for the reasons: It will grow 6 to 8 feet in height and yield 15 to 25 tons per acre. It may be siloed, fed green or cured into hay, and its feeding quality is always superior to fodder corn. It can be sown at any time from the middle of May to the end of July, either broadcast at the rate of 15 lbs. per acre, or in drills, using 10 lbs. of seed per acre. The seed so far has been scarce and high priced, but we can offer it at a lower price than usual. **PRICE POSTPAID:** Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Broom Corn ONE OF THE BIGGEST MONEY-PAYING CROPS IN THE WORLD. In the Northern states the tall varieties do best, while in more Southern states, the dwarf kinds are mostly grown. Our Wisconsin Evergreen has produced over a ton of brush per acre; the Dwarf Evergreen is only little less productive, the market prices of the brush varies greatly according to the crop, from \$30.00 to \$100.00 a ton having been paid in the last years. Broom Corn can be grown where corn grows and requires the same treatment. It should be planted later, however, when the ground is quite warm. Only 70 to 80 days are needed to produce a crop. Plant in drills 3 to 3½ feet apart, the plants 2 to 3 inches apart in the rows according to height. Ten lbs. of seed are sown per acre. **PRICE POSTPAID:** Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Improved Evergreen For length, strength, and straightness of brush this variety is unexcelled. It is of light green color, without the slightest reddish tinge. It makes the best brooms of any variety grown. Height, 7 to 8 feet. **PRICE POSTPAID:** Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Dwarf Evergreen This is a popular variety on account of being not so liable to blow down as the taller varieties. Heads make a fine yield. **PRICE POSTPAID:** Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Oriental Grass.

German Millet,
Northern Grown.

German Millet,
Southern Grown.

Russian Sunflower, 14 in. in Diameter.

Cotton Seed

Tried and Tested—Varieties:
The World's Best

DOUBLING THE YIELD PER ACRE COSTS
NO MORE.

Brown's No. 1 Cotton Seed

Among all that is good we believe there is no variety of cotton in existence that surpasses or equals Brown's No. 1 Cotton. We have hundreds of testimonials from responsible cotton growers who say without stint or reservation, Brown's No. 1 Cotton is not only one of the best, but THE BEST HIGH-CLASSED VARIETY IN EXISTENCE, superior both in yield and quality to other sorts. This is an extra large boll cotton and yields 42 to 45 per cent and has a record of 50 per cent. It has extra long tap roots, greatly assisting it to resist drouth and in all its history has never shown any sign of rust or wilt; TWO BALES PER ACRE CAN AND HAS BEEN MADE with ordinary cultivation and fertilizer. You have only to TRY IT to prove that you have success within your reach. PRICE POSTPAID: Lb., 35c; 3 lbs., 90c. For bulk prices, see Price List.

Long Staple After handling this splendid variety for the past three years, through all kinds of seasons, wet and dry, we come before our customers and the cotton growers in general, with the confidential assurance that there is no better variety grown anywhere, or that will produce a more certain, sure and profitable crop than this grand variety. It is grown extensively and very generally along the Red River Valley all the way from the headwaters of that river, Texas and Oklahoma, to its mouth into the Mississippi river in lower Louisiana, and all our reports, and they are extensive, throughout Arkansas, Oklahoma, Texas, Louisiana, Mississippi, Tennessee, Alabama and Georgia, they everywhere extol it highly as being one of the very best, sure, certain and prolific they have ever tried or tested. The bolls are very long and usually have four to five locks. The lint runs about 1 1/4 inches long, and is of excellent quality. This cotton has sold for 20c to 25c per pound when markets were normal. This seed is grown for us in North Texas by one of the best and most scientific cotton growers of that section, and we have contracted for a specified amount of his most select seed. In order to obtain a supply we would recommend and urge you to order at the earliest period when you can determine on what you want. PRICE POSTPAID: Lb., 35c; 3 lbs., 90c. For bulk prices, see Price List.

Texas Triumph This is another Great Cotton. Another we have been handling for the last three years. Another that has achieved great laurels and earnest commendation, by every one that has grown crops from our seed of it. It's known as the new 16 to 1, but was first introduced seven years ago by a Mr. Mebane of Caldwell County, Texas, and is known in many places where grown as the Mebane Cotton; in other places Mebane Triumph, and plain Triumph, but it makes no difference by which name it is called, just so you get the genuine variety and article which we are listing among the top-notchers, where it has won its way and where it belongs. Among the

Mammoth Russian Sunflower There is hardly a farm anywhere but what an acre or so goes begging for want of a crop. Sunflower offers exceptional opportunity to the thrifty. There is absolutely no waste of the crop. Every portion can be utilized. The flowers make a beautiful garden display, hide unsightly buildings and corners. The seed is eagerly eaten by fowls, and they fatten thereon and lay more eggs than on any other food. It is relished by horses and hogs. Plant in hills 3 1/2 to 4 feet apart each way, or in drills one seed every foot apart in the row. Two to three pounds will plant an acre. The plants will grow from 6 to 10 ft. high and will be literally covered with large heads well filled with seed. In feeding to both poultry and hogs all that is necessary is to allow them to help themselves. PRICE POSTPAID: Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

Flax MINNESOTA NO. 25 OR PRIMROSE FLAX—A pure bred variety from the Minnesota Experiment Station, very much superior to common. It is earlier than common flax, a strong resister of the elements, insects and troubles that the Flax plant is addicted to. Our stock is very pure, free from weeds. North Dakota grown; and the best that can be obtained. PRICE POSTPAID: Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

New Russian Flax This seed came from Russia, the home of tremendous flax yields, the land of strong, hardy, vigorous varieties of flax, the place where flax produces all the way from 40 to 75 per cent more per acre than here in America. Our seed has been grown in this country. It is thoroughly acclimated and is ready to show you what it can do. Our New Russian Flax is immense. It outyields any other variety known so far; it is very early, of vigorous growth, drought and insect proof. It is singularly free from disease and shows its Russian vigor from the start. PRICE POSTPAID: Lb., 25c; 3 lbs., 65c. For bulk prices, see Price List.

best at the time of its introduction, it has been carefully rogued and in every way improved upon each and every year, and still maintains its position at the head of the heap. Few cottons, under the same conditions, make as large a yield of Seed Cotton as the Triumph, and it surpasses every known variety in lint turnout. It produces a strong, thrifty, deep-rooted stalk, with long limbs and short joints. The bolls are large and begin to form near the ground close to the stalk. It is the earliest big boll cotton and stays in well after opening. If planted with the early, small boll cotton, it blooms and fruits at the same time, with the only exception that it takes the large bolls a few days longer to open. When picked free of dirt and water the lint turned out is from 38 to 41 per cent, and in many instances as high as 42 per cent. Last season our grower of this seed reported that his crop averaged a 500-pound bale to every 1,250 pounds of cotton seed throughout the season. OUR TEXAS TRIUMPH or Mebane Cotton Seed, which have been carefully culled, are strictly pure. Our growers buy fresh seed each and every year from the originator at \$2.50 per bushel and are the only growers we have knowledge of that do. If you are interested and want the best pure seed of this variety, don't fail to send for some of this select stock.

PRICE POSTPAID: Lb., 35c; 3 lbs., 90c. For bulk prices, see Price List.

New Crop, Re-cleaned, Tested Clover Seed

SWEET CLOVER

SWEET CLOVER.
Three Times as Valuable as
Red Clover.

AS A PASTURE PLANT Sweet Clover is most valuable. It is the first forage plant in Spring that affords green food to animals and the last one that is killed by frost, and in midsummer, it is cheerfully green when all grasses are dry and parched. Its grazing capacity is one beast per acre. It grows very rapidly, and as soon as it is 5 to 6 inches tall the cattle should be turned on, as tramping the ground suits it, and it should never be allowed to grow very tall or it will get hard and woody; if kept eaten down not too close to the ground the plants will throw out fresh growth on all sides as fast as eaten off, thus furnishing a constant supply of tender growth until frost.

The sowing of seed is done from early spring until July 1st in the north and later in the south. Use 15 pounds seed per acre.

Alfalfa, or Lucerne

ALFALFA, THE GIANT AGRICULTURAL CLOVER—KING OF ALL CROPS.

Yields two to three tons per acre each cutting, three to four crops per year. A wonderful plant that has turned the great west into a paradise of wealth. It grows successfully in every state in this Union, and is adding millions of wealth every year to the farmers. Produces more valuable feed to the acre than any other forage plant on earth. It has many points of excellence that commend it to every wide-awake farmer. It has great feeding value, containing as much protein as wheat bran. It is a wonderful soil enricher; splendid, valuable feed for hogs. The United States Department of Agriculture says:

"In addition to the hay and seed crop, Alfalfa adds \$100 to the value of every acre on which it grows." There is no state in the Union in which Alfalfa cannot be successfully grown. Alfalfa produces three to eight tons per acre. Three hundred stalks have been grown from one seed. It does not exhaust the soil, but enriches it equal to clover. It can be ground into meal and hundreds of carloads are being ground every week by alfalfa mills to feed cattle, hogs, horses and poultry. Alfalfa in money value is worth 45 per cent more than other clovers and 60 per cent more than timothy. It would hardly be possible to say too much about Alfalfa. It is a working plant which is changing the destiny of many farming sections.

Its long branching roots penetrate far down into the earth, push and crowd this way and that and thus constitute a gigantic subsoller. These become an immense magazine of fertility to be drawn upon by other crops for many years after.

A Few Hints on Alfalfa The presence of lime in some form, either in the soil or subsoil, is essential. If it is known there is no lime in the soil, lime should be applied as a top dressing, when the land is being plowed preparatory to sowing the seed. **GOOD DRAINAGE IS NECESSARY**, for an excess of surface water rots out the roots.

Our Alfalfa, Nebraska Dry Land Grown

The great bulk of American seed is grown under irrigation and does not possess that vitality in adjusting itself to

Read Carefully THE PRICES OF ALL GRASS AND CLOVER SEEDS ARE CONSTANTLY CHANGING AND SUBJECT TO MARKET FLUCTUATIONS, AND IT IS ALWAYS BEST TO WRITE FOR LATEST AND LOWEST QUOTATIONS. BUT TO CUSTOMERS AT A DISTANCE, WHO CANNOT LOSE THE TIME REQUIRED TO DO THIS, WILL SAY, IF PRICES ARE LOWER, THEY WILL GET THE FULL BENEFIT. IF HIGHER, WE WILL SHIP ALL THE MONEY SENT WILL PAY FOR. For prices, see Price List enclosed.

White Blossom Sweet Clover Cannot be overestimated for Hay and Pasture for horses, hay and pasture for cattle, hay and pasture for sheep, hay and pasture for swine, honey plant for bees, as a soiling crop for stock, increasing the milk supply; plowing under as a fertilizer; introducing bacteria to the soil; reclaiming worn-out land; preventing erosion and washing; growing on hillsides and steepes; utilizer of barren land.

Sweet Clover Its value is just becoming known; growers who had experience with sweet clover estimate its value as follows: \$4.00 per acre for honey; \$25.00 per acre for hay and pasture; \$25.00 per acre for seed. Total, \$54.00. To this should be added its value as soil renovator, which is very much more than 25 wagon loads of stable and barnyard manure. It is a biennial leguminous plant, tall, somewhat like coarse alfalfa, growing 6 to 8 feet high. Its blossoms, which rarely appear until the second year, are white and give a strong smell of honey, quite perceptible some distance away. If not allowed to reseed, it will die out the second year.

Sweet Clover is an invaluable crop. Nothing superior for fertilizing—equal to Alfalfa in feeding value, excels for pasture purposes, greatest of all honey plants, inoculates land for alfalfa. No plant approaches it when it comes to making money; easy to produce \$100 per acre by growing Sweet Clover. You cannot make money faster than by growing Sweet Clover.

Soil—Sweet Clover grows in all parts of the United States; it possesses a wider adaptability in regard to soil and climate than any other clover or alfalfa. It thrives on the poorest, sandy soil and on dry hillsides, where no other clover will grow; in the west, where irrigation forced the alkali to the surface with the result that it has killed all vegetation except some saltweeds, sweet clover is the only plant that will grow and make a good yield. It will endure more drought than alfalfa.

Sow White Sweet Clover seed $\frac{1}{2}$ inch deep only. Sweet Clover requires a thoroughly compacted seed bed, with just enough loose soil on top to enable the seed to be covered. It is usually the best to seed on ground like corn stubble.

When growing for seed north of middle Iowa allow the second crop to go to seed. South of middle Iowa the third crop is used for seed.

This year we are only handling a very select stock of the hulled seed, as we have installed a machine for scarifying the seed, thus wonderfully increasing the germination and growth.

PRICE POSTPAID: Lb., 40c; 3 lbs., \$1.00. For bulk prices, see Price List.

normal conditions that seed does where grown under natural conditions. We purchase all our seed direct from the growers in Central Nebraska, and know what we are getting; therefore you can rely upon seed that you get from us being grown under natural conditions and of the best quality that can be produced.

PRICE POSTPAID: Lb., 40c; 3 lbs., \$1.00. For bulk prices, see Price List.

When you buy your seeds from us you run no risk. If not entirely satisfactory on receipt you may return them at our expense and money paid for them will be refunded.

We only sell one grade or quality of Grasses, Clover, Alfalfa, etc.—Absolutely and Positively the best—no two or three brands, such as "Prime," "Choice," "Fair," etc., but the best that can be grown.

Medium Red Clover: Iowa Chief Brand—Our Famous Clovers

We sell more clover seed direct to farmers than any seed firm in the West, and it is sold because farmers get a better quality of seed—brighter, cleaner, more plump and vital—than they can secure elsewhere. The reason is that we take special care to have everything first class and protect our customers by using the microscope in both buying and selling.

Our clover seed has become widely known for its purity, strong vitality, hardness, vigorous and healthy growth, and stooling qualities, so that now we receive many orders from the most distant parts of the United States. Well posted farmers appreciate the difference between it and ordinary stock. This is the most important of all clovers and the standard everywhere for hay and pasture and our "Iowa Chief" grade is the plumpest, cleanest, purest, fanciest grade; tested and of high vitality. Farmers usually sow 15 pounds of clover seed to the acre when sown alone, but this seed is so choice that 6 or 7 pounds is really sufficient if conditions are favorable, but we recommend sowing 10 pounds so as to be sure of a perfect stand. About 5 pounds, if sown with timothy.

POSTPAID: Lb., 40c; 3 lbs., \$1.00. For bulk prices, see Price List.

Mammoth Red

This is also called Sapling or Pea Vine Clover. It greatly resembles the Medium Red but grows coarser and more vigorous. It is the best clover for pasturage as it will produce an enormous yield and is of the highest feeding quality but not as desirable for hay. Specially desirable for hog pasture. You can enrich your soil more cheaply by sowing Mammoth Clover and plowing it under than in any other way.

POSTPAID: Lb., 45c; 3 lbs., \$1.15. For bulk prices, see Price List.

Alsike Clover

This is one of the hardiest varieties known. It is a perennial and does not winter kill. It will do better on moist land than any other variety of Clover, and is suitable for either hay or pasture. When sown with other grasses it forms a thick undergrowth and greatly increases the yield. It is frequently sown with both Medium Red Clover and Timothy and the quality of hay thus produced is excellent. It is especially valuable for growing on wet or swamp land. If you have a piece of land that is too damp for Red Top Grass Seed. This will make an excellent crop of hay.

POSTPAID: Lb., 40c; 3 lbs., \$1.00. For bulk prices, see Price List.

Crimson Clover

This fine Clover is one of the most valuable Fall crops the farmer can put in, as it will make the earliest green feed of any of the Clovers. It will yield under favorable conditions 8 to 10 tons of green feed per acre or 1½ to 2½ tons of hay, and is worth as a fertilizing crop \$20.00 to \$25.00 per acre. It can be cut or turned under in time for other early Spring crops, and in warm climates four or five cuttings are made during the season. Crimson Clover can be sown any time from July to October. The seed we offer is Northern grown, on new land and the best and cleanest that can be produced, showing a strong germination and 98% purity. Sow 10 to 15 lbs. of seed per acre.

POSTPAID: Lb., 40c.

Alsike Clover.

White or Dutch Clover

This is the common, little running clover found in most good pastures. Its chemical analysis shows it to be richer in protein than almost any other legume which we grow for forage. It is, of course, too small to grow for hay, but it is invaluable in all pastures, and no pasture mixture would be complete without it; we can thoroughly recommend discing old blue grass pastures and sowing a mixture largely composed of this clover to improve both quantity and quality of the pasture.

POSTPAID: Lb., 75c; 3 lbs., \$2.00. For bulk prices, see Price List.

Winter Sand Vetch

It is a wonderful, rapid grower, and thrives with little moisture. It is a tremendous yielder, producing all the way from 15 to 20 tons of the best green forage per acre—makes the best hay imaginable. It is exceedingly nutritious, much more so than clover, and may be fed with safety to all kinds of stock.

All agricultural colleges, all writers on agriculture, all practical farmers, recommend the growing of Sand Vetch. You cannot find an agriculturist who would not recommend it. This is the case everywhere in America by all those who have given it a trial. As a fertilizer it has but few equals. It enriches the soil wonderfully. The Department of Agriculture at Washington estimates the value of a plowed under crop of Vetch as equivalent to putting into the ground \$16 to \$45 worth of commercial fertilizer to the acre.

It withstands cold; Sand Vetch can be grown early in Spring, as soon as the ground can be worked, and also in Fall in August or September, and the next Spring will come forth fresh, green and vigorous and will form green herbage for cattle. The earliest crop of any forage plants.

Pasture all summer. You can have this excellent fodder plant all summer long, from April until November, not only a little but a great abundance, as Sand Vetch produces heavily. It can be pastured all season until snow covers the ground, severe frosts not injuring this plant like most others, it should be planted in many instances rather than rape. If pastured off when not too far advanced, it will readily grow up again and again.

Soil. As the name would indicate, Sand Vetch has a special adaptation for sandy soils; it has a decided capacity to grow on light soil too poor to produce crops of Clovers, Spring Vetches and Cow Peas. But it will, of course, grow more vigorously on a better class of soils. Sand Vetch is high priced, but it pays to plant it; it improves your soil, yields immense amount of forage per acre and after cutting it

once in Spring or pasturing it for some time you can let the field or part of it go to seed. It is a mistaken idea that seed of Sand Vetch cannot be grown successfully in the North, as it produces large crops of seed here in Iowa, and our stock has been grown here together with fall rye, from which it can easily be separated, and this Iowa Sand Vetch, is far superior to European grown stock handled by other seedsmen, it being purer, of higher vitality and of more vigorous growth. Individual plants will make a ten-foot growth before going to seed. A sowing made in August or September makes excellent fall pasturage for sheep or hogs, the crop in forty days being two feet high. After clover eating it can be left to prevent soil washing during winter and early spring, thus effecting a great saving of soluble mineral fertilizers contained in the soil. It is one of the first plants to start in growth in the spring, covering the ground with a heavy crop early in May. Sow 25 lbs. Vetch and one bushel, either Oats, Barley or Rye per acre.

POSTPAID: Lb., 40c; 3 lbs., \$1.00. For bulk prices, see Price List.

Medium Red CLOVER

Crimson Clover.

Timothy.

country **BROMUS INERMIS** is the greatest. None has ever proven so valuable and of such great importance. It is a hardy perennial, withstanding the extremes of heat and drouth and of cold better than any cultivated grass. It has been fully proven that it will not only succeed and grow under about any conditions, but will do well where timothy, clover, orchard grass or alfalfa will wither and die. It also makes the most astonishing yields under such unfavorable conditions. It is a native of Europe and Asia, ranging from France eastward into Siberia. It is thoroughly permanent and grows with wonderful rapidity, producing heavy crops and luxuriant pastures. Its value to farmers of dry regions cannot be overestimated. All kinds of stock eat it with relish, and chemical analysis shows it rich in flesh producing ingredients, much more so than timothy. It starts very early in spring, and grows later than any other grass in the fall. There is no grass that will withstand the extreme changes in temperature that **BROMUS INERMIS** does without injury. Grows 24 to 36 inches in height, and can be cut two or three times per year. Should be sown in the fall or early in the spring, using twenty pounds seed per acre if sown alone, or if with alfalfa use twelve pounds with eight pounds alfalfa. Our stock of **BROMUS INERMIS** is new crop grown and can be depended upon to grow vigorously and give good results. May be sown in autumn with winter wheat, or in early spring.

For hog pasture a mixture of **Bromus Inermis** and alfalfa, where the latter succeeds well, is recommended by the Kansas State Agricultural College and they also suggest for large pastures for cattle a mixture of the following per acre. **Bromus Inermis**, 10 lbs.; Orchard Grass, 8 lbs.; Meadow Fescue, 8 lbs.; Red Clover, 1 or 2 lbs., added to the mixture. For worn out pastures they advise a disc early in the spring, following with a harrow and sow **Bromus Inermis** on the land, putting most on places where native grasses are most killed out.

POSTPAID: Lb., 30c; 3 lbs., 75c. For bulk prices, see Price List.

Meadow Fescue or English Blue Grass

one of the most valuable grasses that can be sown anywhere in this country. Its most important features are that it is drought resisting, frost resisting and furnishes an abundance of pasturage early in spring and late in fall when other grasses have not come up or have died out.

It is suited to a wide range of soils, does well on loamy, clay, and gravelly soils, and thrives on heavy black loam, strong, and low lying soils; in wet places in a pasture when trampled down by the stock where Timothy, Red Clover and Kentucky Blue Grass fail, Meadow Fescue is the only grass that will keep these places productive, and no amount of trampling is able to destroy it. It is not adapted to light, sandy soils.

Meadow Fescue is of the greatest value if sown in connection with other grasses and as farmers realize the value of mixtures of perennial grasses for pastures or meadows, the demand for Meadow Fescue will be greatly increased, mainly because it is so sure to grow and come up quickly, keeping the weeds down and furnishing forage while the weaker grasses are getting started. Meadow Fescue matures at the same time as Timothy and Red Top and Alsike Clover and for meadows these varieties are often grown together. It is easily exterminated. When plowed up, it's dead for keeps.

Sow 10 to 15 pounds per acre broadcast without nurse crop.

Pat. 20012

Grass Seed Hardy Northern Grown

Read Carefully Prices on Grass, Clover, Alfalfa, Millet and Cane Seed ("Sorghum"), are so fluctuating in value that it is impossible to accurately foretell or gauge future prices and values. Therefore it would be well to write for latest quotations. But to customers at a distance who cannot lose the time required to do this, will say, if prices are lower they will get the full value of money sent. If higher we will ship all the money sent will pay for.

Prices quoted here, are by parcel post, prepaid. For bulk prices, see Price List enclosed.

We pride ourselves that no house in America takes more care in cleaning and placing on the market a superior grade of grass seed than our house does. **WE CALL SPECIAL ATTENTION TO ABOVE PARAGRAPH** by reason of many perplexities we have encountered in handling grass and clover seeds. Many times our catalogue prices and quotations have been entirely out of line; either above or below current prices a month or two after our catalogue had gone to press, but our customers can always rest assured that our prices will be in line with any other reliable seed house in the country.

Timothy is so well known that it needs hardly any description. There are scarcely a variety of natural or tame grass that is so generally cultivated as this. It is suited to moist, rich land, where it grows to perfection and yields under favorable circumstances large crops of hay. If cut at flowering time, it makes splendid nutritious hay, for pasture it cannot be recommended, as almost every farmer knows; close pasturing is injurious to it. When sown with red clover or Alsike clover it makes a splendid mixture, and where it is about half and half the timothy yields fully as much as it alone, and you have the clover crop extra. One feeds off the soil and the other the air; the clover greatly enriching the land. For this reason we have added timothy to all of our clover mixtures, where circumstances will allow.

We want to insist and encourage those who anticipate sowing to order their grass seeds early. Market prices are so fluctuating we do not undertake to make firm prices beyond present stocks, which are at present sufficient under ordinary conditions to meet the requirements of our trade.

POSTPAID: Lb., 25c; 3 lbs., 60c. For bulk prices, see Price List.

Bromus Inermis

THE UNCROWNED KING OF THE DESERT AND DRY, SANDY SOILS. Of all the grasses that grow or ever introduced into this

BROMUS
INERMIS

Our seed is absolutely pure, has a vitality of 100%.

POSTPAID: Lb., 35c; 3 lbs., 90c. For bulk prices, see Price List.

Orchard Grass

A valuable grass for pasture or hay land, and on account of its earliness very valuable for permanent pastures. It furnishes the first green bite in the spring and the last in the fall, and is quick to recover from close cropping, and even thrives better the more it is cropped. Suited to shady places, orchards and groves. Sow 15 lbs. per acre.

POSTPAID: Lb., 30c; 3 lbs., 75c. For bulk prices, see Price List.

Kentucky Blue Grass

Our "IOWA CHIEF BRAND" KENTUCKY BLUE GRASS. We pride ourselves on this extra choice grade, which is of such unusual purity and high germination that it is of special value for lawns.

POST PAID: Lb., 40c; 3 lbs., \$1.00. For

Price List.

Positively the best—no two or as "Prime," "Choice," "Fair," etc., but be grown.

Grass Seed HARDY NORTHERN GROWN

Italian Rye Grass

Italian Rye Grass It is a wonderfully rapid grower and returns heavy hay crops. It is particularly adapted for pastures or meadows, where it thrives luxuriantly. Is a strong grower, arrives at maturity sooner, has a greater abundance of foliage, grows considerably taller, is more upright, and upon the whole produces more than the English Rye Grass.

PRICE POSTPAID: Lb., 30c; 3 lbs., 75c. For bulk prices, see price List.

English Rye Grass It is found to flourish on all kinds of soil, and does well on upland, though rich and moist soils are the most appropriate. It arrives at perfection and produces, in its first year of growth, has a greater supply of early herbage, which is much liked by cattle. Cut for hay immediately after blossom.

PRICE POSTPAID: Lb., 30c; 3 lbs., 75c; For bulk prices, see Price List.

Tall Meadow Oat Grass For either hay or permanent pasture a most valuable grass, which can be successfully grown in all parts of the country. It will not winter-kill, but will live and endure our cold Northern winters, and can also be grown in parts of the country where it is very hot and dry. This variety starts early in spring, and is very valuable pasture grass on this account. It is seldom sown by itself, but mostly with other varieties, as with our Clover Grass Mixtures, where it gives the best results. Succeeds best in deep, rich, sandy soils, and even on clay and heavy dry, soil it does well. It is a true perennial, growing 3 to 5 feet high, and flowering in May and June. It is a splendid grass for the Southern States.

PRICE POSTPAID: Lb., 30c; 3 lbs., 75c. For bulk prices see Price List.

Tall Meadow Oat

Red Top A hardy, native perennial grass, succeeding best on moist land. It accommodates itself to a variety of soils, however, even to quite dry situations, and stands hot climates admirably. It is the most permanent grass we have. It remains green for the greater part of the year. Sown largely in marshy land and sloughs in the West. In the East it is one of their principal sorts. Fancy cleaned seed.

One of the best mixtures for swampy, marshy, wet land or land that sometimes overflows, is Red Top and Alsike Clover, mixed 5 lbs. each to the acre.

PRICE POSTPAID: Lb., 35c; 3 lbs., 90c. For bulk prices, see Price List.

Creeping Bent Grass (*Agrostis Stolonifera*.) Distinctive on account of its compact, creeping, rooting stems. Of rapid growth, and spreading habit, forming a strong, durable turf. Fine for lawns and putting greens, because of its fine texture. If sown alone, use 50 lbs. to the acre.

PRICE POSTPAID: Lb., 60c; 3 lbs. \$1.50. For bulk prices, see Price List.

Johnson Grass Some of our customers will no doubt smile when they see we are featuring Johnson Grass. This grass has long been called a pest in some places in the South. In fact, when it gets a hold it is almost impossible to eradicate it in the South where the ground freezes but slightly, or not at all, but in the North where we have cold winter, zero weather it kills it annually, as dead as a corn stalk.

Here in Iowa it makes 5 tons of grass per acre, and this all inside of four months. The leaves, stalks and pinnacle resemble those of sorghum. In our opinion and in many others who know this grass and use it for hay purposes, there is nothing better. We have decided to feature it, for we know that many customers want to plant a permanent grass for pasture and hay. Don't plant this in the South unless you intend to keep it on your farm. It may surprise you to know that we sell many thousands of pound lots of Johnson Grass seed every year, and we receive so many letters every day asking if we can furnish the seed, that we want to call our customers' attention to it, as many think we do not carry it. The grass can be killed out by constant cultivation, by plowing the ground during extremely hot weather or planting the ground in a crop that needs a good deal of cultivation.

This grass has long been avoided by a great many farmers of the South, but they are now coming to know its value as a hay crop. Johnson Grass hay is staple on any market in this country, always brings a splendid price. It can be sown almost any month in the year whenever there is sufficient moisture in the ground to start germination. It is not like small grass seed in the way of getting a stand as there is no trouble whatever in getting a good stand. The ground should be plowed and harrowed and sown in. It requires about 15 to 20 pounds per acre, but it produces a perennial grass with long canes, immense amount of forage readily. We have many calls for it, and it is coming to realize

its value. Last season we sold thousands of pounds of this seed.

PRICE POSTPAID: Lb., 30c; 3 lbs., 75c. For bulk prices, see List Price.

Bermuda Grass This is a perennial grass of creeping habit, very valuable for the southern states, as it withstands drought better than any other variety. It has long, creeping stems which root at the joints and cover the ground with strong matting of fine turf. It is a splendid pasture grass, furnishing excellent summer pasture when most other grasses are burned out. Grazing and trampling of stock does not impair it. It is also much used for lawns in the south, as it stays green all summer. It is of no value for the northern states as it freezes out farther north than Southern Kansas, Missouri and Illinois. It does well on any kind of soil, thrives on the poorest and sandiest soils. The seed is sown in spring at the rate of 3 to 5 lbs. per acre.

PRICE POSTPAID: Lb., \$1.00; 3 lbs., \$2.60. For bulk prices, see Price List.

Lawn Seed Grass A smooth, velvety lawn surrounding a house adds not only to the value, but enhances the enjoyment of every home. The most important thing to consider in selecting seed for a lawn is to obtain a proper mixture of several varieties. By properly choosing early, medium and late grasses a smooth, even green lawn is assured from early spring to late autumn. A given area can support only so many grass plants of one kind, for they all absorb the same kind of food, but if several varieties are sown the same area will support many more plants, as different sorts live on various elements in the soil. With these facts in mind our IOWA CHIEF BRAND Lawn Grass is scientifically mixed and combined. Our experience of many years has given us intimate knowledge of grasses, their habits and requirements.

PRICE POSTPAID: Lb., 50c; 3 lbs., \$1.25. For bulk prices, see Price List.

Everybody Loves Flowers

Flowers are inexpensive, and if you select the right kind they are as easy to grow as weeds, but everybody is not familiar with the kind of flower seed to buy and the quantity to buy to make the quickest and most satisfactory showing. We are, however, pleased to offer a very choice list of the most popular and easily grown flower seeds. They are all strictly fresh, new crop grown, and of the very best obtainable. We much regret that space will not admit of a complete illustration of all of them. We might add that we could have listed and illustrated a thousand other additional varieties, but it would have only bewildered and confused you, and we have ultimately selected the well known and most popular varieties—varieties tried and tested and known to be first class and of the hardest and most beautiful, and of unlimited colors.

As a matter of fact it don't take much of an investment in flower seeds to produce a very satisfactory flower garden which will give you bloom throughout the entire season.

But you owe it to your children as well as yourself, to have a nice flower garden. They like flowers and turn

instinctively to these pets of mother earth. They appeal to the finer sensibilities. Nature teaches the little ones many noble lessons through the flower garden. Give them a patch of the house and watch the joy of their young faces as the first leaves come through and the exclamation of happy glee as one bloom after another appears. Don't deny your little ones these happy days in their young lives.

The question of cost is scarcely a consideration when a whole family can enjoy the beauty of a perfectly lovely flower garden for only a dollar or two.

Giant Branching Asters

Of our long list of flowers there is none more popular and generally satisfactory than the aster. For late summer and fall display it has no equal for its double flowers, its numerous forms and free blooming. The newer varieties are of great beauty.

Bland's Early June

Decidedly the earliest flowering Aster, being a week to two weeks earlier than Queen of the Market. Flowers of good size, pure white and continuous bloomers. The stems are long. Pkt., 10c.

Queen of the Market

Earliest of all except the above. Mixed colors. Pkt., 5c.

Express Comet Mixed

Pkt., 5c.

Royal Purple

(See Cut No. 1.) A truly royal flower, not only in sturdy character of the plant, but also in the great size and substance of the bloom, and the imperial richness of color in the flower. Of branching type. Pk., 10c.

Crimson King

(No. 2.) A type of branching aster, producing immense large flowers of shining crimson shade, on strong upright stems. Unexcelled as a show flower, either in beds or as cut flowers. Pkt., 10c.

Snowball

(No. 3.) A beautiful and distinct variety and the best white; of refined and faultless form and very freely productive. Fine for pot culture. Pkt., 10c.

Daybreak

(No. 4.) Large flowers, intensely double and covering the plant in profusion. Color a beautiful light sea shell pink. Flowers medium early and continuously branching. Pkt., 10c.

Crown (No. 5.) The center of each flower white, surrounded by a broad margin of color—crimson, rose, violet, etc.; flowers are large, freely produced. Beautiful and showy. Mixed colors. Pkt., 5c.

Marvel (No. 6.) Most charming new variety from Germany. Flower large and petals pure white, beautifully striped with a band of blue, red, pink, lilac or some other distinct color down the center of each. A very brilliant and showy flower. Pkt., 10c.

Semple's Branching

Flowers are large and double, borne on large, stiff stems. Mixed colors. Pkt., 5c.

Giant Comet

Shape differs from all others, resembling the Japanese chrysanthemum. The flowers are from 3 to 4½ inches in diameter, perfectly double. We can furnish this variety in white, crimson, light blue and mixed colors. Each, per pkt., 10c.

FINE MIXED. Embracing a great many varieties and colors. Pkt., 5c.

Lady Slippers or Touch-Me-Not

These are old favorites with everyone, owing to their handsome double flowers, brilliant colors and stately growth. Half-hardy annuals.

Camelia, Flowered

Double, very choice; spotted and variegated with white mixed. Pkt., 5c. **FINE MIXED.** Finest varieties and colors, mixed. Pkt., 5c.

Asters.

Balsam.

Candytuft.

demand; in bloom the whole summer. Also good for winter blooming in pots; succeeding in any soil. Indispensable for bouquets. Hardy annuals. **Pkt., 5c.**
FINE MIXED. 13 inch. **Pkt., 5c.**

Calceolaria Mixed colors. **Pkt., 10c.**

Canterbury Bells Very ornamental garden plants of easiest culture; hardy biennial, 2½ feet high, producing large, bell shape flowers of exquisite colors. Fine mixed. **Pkt., 5c.**

Carnation The finest of the Pink family, very fragrant. Our seed is unsurpassed. Finest mixed, the best greenhouse variety. **Pkt., 10c.**

Cineraria From a single plant the Cineraria is a wonder of wealth of bloom and symmetry of form. **LARGE FLOWERING MIXED.** **Pkt., 10c.**

Cypress Vine A beautiful climber with delicate, dark green foliage, and an abundance of bright star-shaped scarlet and white blossoms, which in the bright sunshine, is a mass of beauty. Mixed colors. **Pkt., 5c.**

Daisy (Bells Perennis.) Will make young, strong plants to carry over winter, with protection, and blooms very early in the spring.
FINE DOUBLE MIXED, 6-inch. **Pkt., 5c.**

New Giant Snowball A most charming variety of this handsome little flower. Don't fail to give little beauty a fair trial, and it will be sure to please you. **Per pkt., 10c.**

Dahlia Every one knows and admires the Double Dahlia, but few are aware that it can be grown as easily from seeds, and flowers the first season. **DOUBLE MIXED.** Finest varieties, two to four feet. **Pkt., 5c.**

Carnation.

Four O'Clock (Marvel of Peru.) Everyone knows this favorite annual. **Pkt., 5c.**

Chrysanthemum A handsome plant, with striking and brilliant flowers, blooming till late in the autumn, in full glory; producing double and

Flowers

Double Camelia, Flowered These are like Asters, Pansies, Phlox and Peas, one of our specialties, which we sell to the best trade all over the country, and we know that our seed will produce fine, large, double flowers in great abundance.

Antirrhinum (Snapdragon.) Gaily colored flowers. Choice mixed. **Pkt., 5c.**

Bachelor's Button It is a beauty, a great favorite in all parts of the old country. An unique little plant, forming a dense mass of foliage, over which are borne hundreds of lovely blue blossoms, beautifully fringed and serrated. Hardy annuals; two to three feet high. **Pkt., 5c.**

Canna Stately and highly ornamental foliage plants, growing from five to ten feet high, and forming a most beautiful object for the lawn or large circular beds. Mixed, all colors. **Pkt., 5c.**

Ageratum Valuable plant for large beds or borders, and very useful where cut flowers are in blooming in pots; succeeding

Canterbury Bells.

Fox-Globe (Digitalis.) Showy for backgrounds and borders, and are very beautiful when planted among shrubs. Thrives in any ordinary garden soil. Fine mixed colors. **Pkt., 5c.**

Dianthus (Pink.) The China and Japan Pinks are deservedly very popular, as few flowers can equal them in beauty and profusion of bloom. **Pkt., 5c.**

Chinese (Double Chinese Pink.) A splendid mixture; one of the finest varieties; one foot. **Pkt., 5c. FANCY MIXED.** **Pkt., 10c.**

Candytuft (Iberis.) Among the most useful of perfectly hardy annuals. Will grow in any soil, requires no care, and produces neat clusters of flowers very freely. **Pkt., 5c.**

Empress A beautiful pure white variety of branching habit, producing trusses of flowers. We can recommend this for a fine bed of early white flowers. **Pkt., 5c. FINE MIXED,** including many colors. **Pkt., 5c.**

Calliopsis Bright golden flowers, rich velvety and orange colors in choicest mixture. **Pkt., 5c.**

Coxcomb A class of very magnificent, attractive and showy annuals, producing massive heads of rich shades and colors, of great effect in the garden or in plots. Well adapted to our climate, as they will stand drouth well. **FINEST MIXED.** All colors; 2 feet. **Pkt., 5c.**

Cosmos **MAMMOTH PERFECTION.** Seed sown in April or May and transplanted to open ground will produce plants five or six feet high by September, and from then till November will be covered with hundreds of blossoms three inches across, resembling single dahlias. All colors, mixed. **Pkt., 5c.**

Hybridus Mixed A choice mixture of all colors and sorts. **Pkt., 5c.**

Forget-Me-Not Well known garden favorites. Flowers freely from seed the first summer. Blue, sky-blue, white, mixed. **Pkt., 5c.**

Gourds (Climbing.) These curious and interesting plants should be more largely grown. All varieties mixed. **Pkt., 5c.**

Heliotrope.

single flowers of various shades; very attractive for bouquets and vases. Sometimes called "Painted Daisies." Hardy annuals. **Single Annual, mixed.** **Pkt., 10c. Crimson and Double Annual, mixed colors.** **Pkt., 10c.**

Flowers

Geranium Started early, this favorite flower can be produced from the seed, and will flower the first season. Finest mixed. Pkt., 10c.

Gallardia (Annual varieties.) Very showy garden annuals, 1 to 2 feet high. Grown in masses they are specially effective; large flowers, 2 to 3 inches across, produced from early summer until frost; unrivaled for cutting. Pkt., 5c.

Heliotrope A well-known, profuse flowering and deliciously fragrant plant that everyone loves. Splendid for bedding or pot culture. Can be easily raised from seed, but should be started early in the house. Half hardy perennial.

FINE MIXED. Choicest varieties mixed; 18-inch. Pkt., 5c.

Sweet William (Finest Mixed.) Hardy plants about one foot high, of extreme richness and variety of color, and also deliciously sweet-scented. Our mixture is of the large flowered strain and contains many bright and beautiful colors and markings. Pkt., 5c.

Sunflower Some varieties of this well known plant are very ornamental, and are effective in proper situations in shrubbery borders or as screens. Pkt., 5c.

Hollyhocks All our seeds of this beautiful plant have been saved from the finest and largest double flowers only, and will produce flowers extremely double and in the best, brightest and most charming colors. Sow early. Double. Pkt., 5c; single pkt., 5c.

Hibiscus Robust garden annuals; large saucer-shaped flowers of creamy yellow, with purple center; two feet. Pkt., 5c.

Larkspur, New Double Hybrids.

Hiacinthus Candicans Giant summer flowering hyacinth of robust growth, producing spikes three feet long, of white bell-shaped flowers, five feet.

Ice Plant Pretty summer annual trailer for vases and rockwork; leaves covered with ice-like drops. Much used in Europe for garnishing; half foot. Pkt., 5c.

Larkspur (Delphinium.) Plants of great beauty, richness and endless variety of colors, with great duration and profusion of bloom. DOUBLE FINE MIXED. Many varieties and colors. Pkt., 5c.

Lantana Rapid growing, constant blooming, tender perennial plants for pot culture in winter or garden decorations in the summer; clusters of flowers, orange, white, pink, etc.; two to three feet. Mixed colors. Pkt., 5c.

Marigold (Tagetes.) A free flowering plant of easy culture, with double flowers of rich and beautiful colors, producing a splendid effect, whether planted in beds or borders, and continuing in beauty until destroyed by frost. Half-hardy annuals. Pkt., 5c.

AFRICAN MIXED. Best double colors; two feet. Pkt., 5c.

DOUBLE FRENCH MIXED. Yellow, brown and crimson, beautifully striped; one foot. Pkt., 5c.

Mignonette (Reseda Odorato.) This fragrant little plant is probably the most popular annual grown. If the plants are thinned out they will grow stronger and produce larger spikes of flowers. Pkt., 5c.

SWEET SCENTED Odorato. The old variety, very fragrant; 1 foot. Pkt., 5c.

MIGNONETTE, MIXED. Many varieties. Pkt., 5c.

Morning Glories (Fine Mixed.) A mixture of the old varieties. Pkt., 5c.

Moon Flower (Finest Mixed.) Pkt., 5c.

Nasturtium (Dwarf.) One of our showiest and most popular annuals, forming compact plants, making gorgeous masses of rich colored and brilliant flowers. Pkt., 5c.

KING OF TOM THUMBS. Pkt., 5c.

FINEST MIXED. Pkt., 5c.

FINEST MIXED TALL NASTURTIUM. Pkt., 5c.

Pansy (Heartease.) The Pansy is the most popular of all flowers grown from seed. It is everywhere popular, both for the brilliant beauty of its flowers and the long continuation of bloom.

FAUST OR KING OF THE BLACK. Pkt., 10c.

WHITE OR SNOW QUEEN. Pkt., 10c.

FINE MIXED. Pkt., 10c.

Petunias Indispensable flowering plants for both garden and pot culture, flowering continuously. They flower in a few weeks' time from seed. Height about one foot.

SINGLE FINE MIXED. Pkt., 5c.

ALBA. Pkt., 5c.

FINE MIXED. Pkt., 5c.

DRUMMONDI. Pkt., 5c.

Portulaca In brilliancy and beauty of colors Portulacas are unrivaled. They delight in sunny situations and light soils, where they rapidly carpet the ground.

FINEST SINGLE MIXED. Pkt., 5c.

DOUBLE ROSE, FLOWERED MIXED. Pkt., 5c.

Zanzibarensis The largest castor bean in cultivation. An entirely new class from Africa with leaves often measuring two feet across, some being light green, others bronze brown. Pkt., 5c.

FINE MIXED. The best and choicest varieties mixed. Pkt., 5c.

Wallflower Greatly prized for their exquisite fragrance. They grow in long, brilliant colored spikes of flowers. There are many varieties. Plants removed to pots in autumn will produce an abundance of delightfully fragrant flowers. DOUBLE VARIETIES MIXED. Pkt., 10c.

Double Hollyhocks.

Flowers

Salpiglossis

One of the most beautiful of flowering annuals, forming strong, bushy plants about eighteen inches high, bearing throughout the season large flowers three to four inches across, of many beautiful colors. Sometimes called Painted Tube Tongue.

New Variveined Much larger than the common Salpiglossis. The surface is soft and velvety and wealth of color marvelous. The colors range from pure white to dark yellow, dark red and purplish black, including light and dark blue, velvety plum color, maroon, crimson, dark brown, golden and lemon yellow, white, dark purple, black, brilliant scarlet, with all the shades between beautifully veined and mottled. Blooms all summer and till frost. Pkt., 10c.

Salvia

Splendens One of the most brilliant of flowers. It thrives in any light, rich soil; often called flowering sage. Free bloomers. Brilliant scarlet. Is very fine. One of the most satisfactory of all bedding plants. Pkt., 10c.

Sweet Peas

Choice New Spencer Sweet Peas Noted for their distinct markings. Flowers are large, beautifully waved and fluted on the standards, with well waved wings.

Margaret Atlee The Largest and Best Lavender Spencer Pea Yet Introduced. The flowers are truly magnificent and of immense size. The standard is unusually large and bold, pronouncedly waved, yet standing erect and broad, frequently measuring two inches across. The color is a soft, clear, rich lavender, which is enlivened by a very fair sheen of rose pink.

The large, well-spread wings are of the same coloring, frilled and well waved. It is practically a self color and branches beautifully, attracting universal admiration. The plant is extremely robust in growth, flowering most profusely. The stout stems measure 12 to 14 inches in length, and a large proportion bear four well placed flowers. Pkt., 10c.

APPLE BLOSSOM SPENCER. Rose and bush-pink, beautifully waved. Pkt., 10c.

BLACK KNIGHT SPENCER. Rich, deep maroon, very large. Pkt., 10c.

COUNTESS SPENCER. A lovely clear pink, shading deep at the edges, the original of this type. Pkt., 5c.

FLORENCE MORSE SPENCER. Delicate blush, with pink margin, a charmingly beautiful flower of very large size. Pkt., 5c.

HELEN LEWIS (Orange Countess). Brilliant crimson-orange, wings orange-rose. Pkt., 5c.

KING EDWARD SPENCER. Bright crimson-scarlet. Magnificent in size and color. Pkt., 10c.

MRS. ROUTZAHN SPENCER. Soft chamols pink, a beautiful shade, and charming as a cut flower. Pkt., 10c.

PRIMROSE SPENCER. The largest and finest primrose-yellow. Pkt., 5c.

WHITE SPENCER. A pure, wavy white of enormous size and splendid substance; long, strong stems. Pkt., 10c.

BLANCHE FERRY. Pkt., 5c.

BLANCHE BURPEE. Pkt., 5c.

COUNTESS OF RADNOR. Pkt., 5c.
OUPID. Pkt., 5c.

EMILY HENDERSON. Pkt., 5c.
EMILY ECKFORD. Pkt., 5c.
EXTRA EARLY BLANCHE FERRY. Pkt., 5c.

MAID OF HONOR. Pkt., 5c.
WILHELMINA. Pkt., 5c.
LADY PENZANCE. Pkt., 5c.
NEW DWARF OR BONFIRE. (Large Flowering Scarlet Sage). Pkt., 10c.
FANCY MIXED. Pkt., 10c; oz., 20c; 1/4 lb., 40c; 1b., \$1.50 postpaid.

Mrs. C. N. Page Dwarf, free blooming sort. Much earlier than Splendens; brighter color. Nothing makes such a brilliant show as a bed of Salvia; is especially fine for bordering canna beds. Offered in seed for first time. Pkt., 10c.

Stocks

Sometimes called Gillflowers. These popular flowers are easily grown, and are so highly fragrant and of such great beauty, and have so many good qualities that they deserve a place in every garden. They should be given good, rich soil to grow in and will reward good treatment with remarkable pyramid of bloom.

Perpetual White (Princess Alice or Cut and Come Again.) Strong growth, of fine branching habit and if sown early will bloom from May to November. Flowers very large and pure white; the more they are cut the better they like it. Deliciously fragrant. Pkt., 5c.

Perpetual Mixed A mixture of colors of the continuous blooming types of perpetual stocks. Splendid selection of seeds; choicest strains. Pkt., 5c.

CASH DISCOUNT ON FLOWERSEEDS IN PACKETS
50c WORTH FOR 40c; \$1.00 WORTH FOR 75c; \$2.00 WORTH FOR \$1.50.

INDEX TO CATALOG

VARIETIES	A	PAGE
Asparagus.....		11
Asparagus Roots.....		11
Artichoke.....		11
Alfalfa.....		72
Alsike Clover.....		73

VARIETIES	B	PAGE
Brussels Sprouts.....		11-23
Bore Cole.....		11
Broccoli.....		11-23
Beans—Bush.....		12-13
Beans—Bush Wax.....		13-14
Beans—Bush Lima.....		14-15
Beans—Pole.....		16
Beets—Table.....		16-17
Beets—Stock.....		18
Beets—Sugar.....		18
Buckwheat.....		66
Billion Dollar Grass.....		69
Broom Corn.....		70
Bromus Inermis.....		74
Blue Grass—Kentucky.....		74
Blue Grass—English.....		74
Bermuda Grass.....		75
Barley.....		62-63

VARIETIES	C	PAGE
Club Orders.....		6
Collection Garden Seed.....		7-39
Cash Prizes.....		6-10
Collection Flower Seed.....		7
Corn Salad.....		23
Collards.....		23
Chervil.....		29
Chicory.....		23
Carrots—Garden.....		13
Carrots—Stock.....		20
Cabbage.....		10-21-22
Celery.....		10-23
Cress.....		23
Cauliflower.....		24
Cucumbers.....		25
Chufas.....		26
Cantaloupes.....		28-29
Corn—Field.....		8-47
Corn—Sweet.....		25
Cane.....		68
Cotton—Seed.....		71
Clover—Medium Red.....		73
Clover—Mammoth Red.....		73
Clover—Alsike.....		73
Clover—Crimson.....		73
Clover—White.....		73
Clover—Sweet.....		72
Creeping Bent Grass.....		75

VARIETIES	D	PAGE
Durum Wheat.....		64
Dwarf Essex Rape.....		69

VARIETIES	E	PAGE
Express Rates.....		2
Endive.....		26
Egg Plant.....		26
Emmer or Speltz.....		62-63
Ensilage Corn.....		56
English Blue Grass.....		74

VARIETIES	F	PAGE
Fodder Corn.....		56
Forage Plants.....		68
Flower Seeds.....		76-77-78-79
Freight Rates.....		3
Feterita.....		66
Flax.....		71
Free Premiums.....		6-10

VARIETIES	G	PAGE
Grass Seed—Lawn.....		75
Grass Seed—Miscellaneous.....		74-75
General Information.....		1
Ground Cherry.....		26
Garlic.....		26
German Millet.....		70
Gourds.....		26

VARIETIES	H	PAGE
Home Garden Collection.....		7
How to Order.....		1
Horse Radish Roots.....		40

VARIETIES	I	PAGE
Insured Parcel Post.....		2
Information.....		1

VARIETIES	J	PAGE
Jerusalem Corn.....		68
Johnson Grass.....		75

VARIETIES	K	PAGE
Kohl Rabi.....		26
Kale.....		11
Kafir Corn.....		68
Kentucky Blue Grass.....		74

VARIETIES	L	PAGE
Leek.....		26
Lettuce.....		27
Lucerne or Alfalfa.....		72

VARIETIES	M	PAGE
Milo Maize.....		68
Mustard.....		26
Market Gardeners.....		1
Melons—Musk.....		28-29
Money Saving Crops.....		67-68
Melons—Watermelons.....		30-31-32
Miller.....		70
Macaroni—Wheat.....		64-65
Magi Queen Tomato.....		42
Meadow Fescue.....		74

VARIETIES	N	PAGE
Name and Address.....		1
"No Name" Tomato.....		10
Novelties.....		10

VARIETIES	O	PAGE
Oriental Grass.....		70
Orchard Grass.....		74
Oats.....		8-60-61-62
Onions.....		33-34
Onion Sets.....		34
Okra.....		35
Orange Sorghum.....		68

VARIETIES	P	PAGE
Prize Collection.....		39
Prepaid Stations.....		1
Parcel Post Rates.....		2
Pepper Grass.....		23
Parsnips.....		35
Pumpkins.....		35-36
Parsley.....		35
Peanuts.....		35
Peppers.....		10-36
Peas—Garden.....		10-37-38
Pie Plant.....		38
Potatoes.....		44-45-46
Pencilaria.....		66

VARIETIES	R	PAGE
Rye.....		63-64
Red Top Grass.....		75
Rape.....		67

VARIETIES	R	PAGE
Returning Goods.....		2
Rutabaga.....		41
Rhubarb Roots.....		38
Rhubarb.....		38
Radish.....		10-39-40
Russian Sunflower.....		71

VARIETIES	S	PAGE
Size Limit of Package.....		
Swede Turnips.....		4
Spinach.....		31
Squashes.....		44
Sun Flower Seed.....		7
Spelts or Emmer.....		62-6
Seed Oats.....		8-60-61-6
Spring Wheat.....		64-6
Sudan Grass.....		6
Sorghum.....		6
Shallu.....		7
Sugar Corn.....		2
Sweet Clover.....		7
Sand Vetch.....		7

VARIETIES	SEED CORN	PAGE
Diamond Joe's Big Early White.....		9-48-4
Green Co. Prize Winner No. 302.....		4
Iowa Silver Mine.....		5
Johnson County White.....		5
Imperial White.....		5
Hickory King.....		5
St. Charles White.....		5
Wallace's Favorite.....		5
Boone County White.....		5
Pride of Nishna.....		5
Mammoth Iowa Yellow Dent.....		5
Iowa Gold Mine.....		5
Reid's Yellow Dent.....		5
Gold Standard Leaming.....		5
Pride of the North.....		5
Legal Tender.....		5
Improved Calico.....		5
Southern Red Cob Fodder.....		5
Eureka Ensilage.....		5
Silver King.....		5
Queen of Nishna.....		5
White Cap Bloody Butcher.....		5
White Cap Yellow Dent.....		5
Longfellow Flint.....		5
Dibble's Mammoth Early Flint.....		5
Sanford's White Flint.....		5

VARIETIES	T	PAGE
Terms About Ordering.....		
Turnips.....		
Tomatoes.....		10-42
Tested Seed Corn.....		
Teosinte.....		
Timothy.....		

VARIETIES	V	PAGE
Vetch.....		

VARIETIES	W	PAGE
Warranting Our Seeds.....		
Weight Limit on Package.....		
Winter Sand Vetch.....		
White Clover.....		
White Blossom Sweet Clover.....		
Wheat—Spring.....		64
Wheat—Winter.....		

SEED INOCULATION

INSURES A STAND --- ENRICHES THE SOIL --- INSURES SUCCESS WITH LEGUMES

THE VALUE OF INOCULATION

gen is the most important of the various chemicals which form the food of all plants. The air is three-fourths nitrogen, but unfortunately plants cannot take up free nitrogen. It must first be put into a form in which the plants can use it. Wheat, corn, etc., cannot take nitrogen from the air, but must take it from the soil, thus exhausting the soil, in time, unless nitrogen is supplied to the soil. This can be done by the use of manure or commercial fertilizer which carries nitrogen (ammonia). Unfortunately the average farm does not produce sufficient manure. Fertilizers are rapidly increasing in price, and the supply is now far short of the demand. In the eastern and middle part of the United States, the farmers were long ago driven to artificial fertilization. In the great west, where the soil was deeper, and the elements later, fertilization was not heretofore so necessary. Western farmers are now realizing that their soils are not infallible. Some are already depleted of nitrogen, and all western soils sooner or later reach the same condition as the soils of the south.

ately there is a class of plants which form nodules on their roots. These plants are called legumes and include all the clovers, beans, peas, vetch, etc.

nodules are simply masses of living germs, or bacteria, which take nitrogen from the air and convert it into a form available for the plant. In fact the bacteria in these nodules not only supply the plant with all the nitrogen it can use, but take up far more, the excess going to the soil for the benefit of future generations of crops.

But nodules no nitrogen can be taken from the air. Without legumes take their nitrogen from the soil thus exhausting it the same as wheat or corn, their greater fertilizing value being

due only to their larger root system which furnish considerable humus as it decays. And the benefit does not lie alone in the fertilization of the land itself. As these bacteria, in the nodules, supply the plant with sufficient nitrogen for its growth, the yields increase, the legume grows faster, matures earlier, takes on a greener color, and is of higher feeding value as it is higher in protein.

How then can a farmer be sure of nodules developing on the roots of a legume crop. There is but one answer, INOCULATE. Inoculation is simply the placing of germs on the seed, before sowing. These germs will rapidly develop into colonies and form nodules. It is true that some soils contain sufficient bacteria, especially in some parts of the country to inoculate a crop. Other soils do not. Some years ago red clover succeeded all over the central states without inoculation. But the red clover bacteria, from the souring of the land and other causes, has been exhausted on most soils. Today, red clover does not succeed in the central or eastern states without inoculation except in a few especially favored sections. As for alfalfa and sweet clover it is now practically impossible to get a stand in the east without inoculation. And what is now true in the east is becoming true in the west, in fact is already true in many parts of the west. As for beans, peas, vetch and other legumes they may succeed fairly well without inoculation but will succeed better when inoculated and will furnish far more nitrogen to the soil from their nodules than they can possibly furnish from the decay of the roots alone.

The expense of inoculation is so small, the trouble so little, that no farmer, either east or west, should take a chance on losing a crop for want of inoculation.

Inoculate the seed of all legumes, make inoculation certain, don't trust to chance—play safe.

PREPARED FOR

Alfalfa
Sweet Clover
Red Clover
Alsike Clover
Vetch
Soy Beans
Cow Peas
Garden Beans
Field Beans
Garden Peas
Field Peas
Sweet Peas
Mammoth Clover
Crimson Clover

THE COST IS LOW

STANDARD INOCULATING BACTERIA sells at 60c per one "acre" bottle will inoculate 15 pounds of alfalfa, clover or small seeds, or 1½ bushels of beans or peas. The price has been so low to place it in the hands of every farmer of the land. It is positively of the best; no better bacteria can be made. A higher grade product is impossible; everything has been done that modern science knows how to do to produce the most perfect and highest verity. The low price has simply been made possible by the immense sales of this product—large sales and smaller sales. This is the principle behind nearly every firm that has made a success. In fact this is the principle that is sending standard inoculating bacteria into all the countries of the world.

EXPERIMENT STATIONS ADVISE INOCULATION

MISSOURI CAROLINA says (Bul. 53), "inoculation is not a cure all. It is a help. It will send the farmer further forward in three years than he could have done in five years without it in a generation."

MASSACHUSETTS says (Bul. 87), "that inoculation increased crimson clover 138%, field peas 138%, vetch 89%."

VERMONT says (Bul. 226), "that inoculation increased the yield of alfalfa 500%, lima beans and cow peas 100%, beans 75%."

ARMY BULLETIN says (Bul. 315), "legumes reach their maximum value as green manures only when abundantly supplied with bacteria."

In Bulletin No. 315 issued by the United States Department of Agriculture inoculation is highly recommended. Among other things this bulletin says "the peculiar value of legumes for maintaining and increasing the fertility of soils is due to certain bacteria which develop nodules upon the roots of leguminous plants and which have the unique power of rendering the free nitrogen of the atmosphere available for plant growth. Without these bacteria, legumes, like other crops, exhaust the soil of its combined nitrogen."

HOW APPLIED

This bacteria is applied direct to the seed, before sowing, which puts it right on the incipient root of the plant.

Why use the laborious method of hauling ground from another field, scattering it broadcast, and then trusting to luck for some of it to come in contact with the roots of the new plants? Why take a chance of importing plant diseases and weed pests in soils from other fields? Use the scientific method—the safe method.

PRICE

Garden size	\$0.35
1 Acre size	1.60
2 Acre size	1.00
4 Acre size	1.75
6 Acre size	2.25

Postpaid on receipt of price.

JEFFERSON-RATEKIN SEED CO. Jefferson, Iowa

COVER VEGETABLE COLLECTION

GEM OF EDEN MUSKMELON	10¢
NEW NATIONAL WATERMELON	10¢
GOLDEN BANTAM SWEET CORN	10¢
MAGIQUEEN TOMATO	10¢
WHITE SILVERSKIN ONION	10¢
TWENTY DAY WHITE RADISH	10¢
TOTAL 60¢	
ABOVE UNBROKEN COLLECTION	
45¢ POSTPAID	

FLOWER COLLECTION

SWEET PEAS	10¢
CARNATIONS	10¢
ASTORS	10¢
PANSIES	10¢
DAISIES	05¢
DIANTHUS	05¢
TOTAL 50¢	
ABOVE UNBROKEN COLLECTION	
35¢ POSTPAID	

**BOTH ABOVE COLLECTIONS
BY MAIL POSTPAID 75¢**

NEW NATIONAL
WATERMELON
10¢ PKT.

GEM OF EDEN
MUSKMELON
10¢ PKT.

**JEFFERSON RATEKIN SEED COMPANY
JEFFERSON, IOWA.**