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RATEKIN'S

SEED
HOUSE

Largest Seed House
in the West

1914
30TH
YEAR

MAGI QUEEN
EARLIEST TOMATO IN THE WORLD

SHENANDOAH, IOWA.

TO OUR PATRONS AND FRIENDS, GREETINGS!

A black and white photograph of a man standing on the left side of the page. He is wearing a dark suit, a white shirt, and a dark hat. He is holding a seed catalogue in his left hand, which is open to a page showing a picture of a person working in a field. The catalogue has the word "WANTED" printed vertically on the left side of the page.

I AM PRESENTING THIS OUR THIRTIETH ANNUAL FARM AND GARDEN SEED CATALOGUE to farmers, gardeners and truck growers, for 1914, I wish to tender my sincere thanks and acknowledgments to all those who, through their orders, have given practical support to my business, and also to the many, whose words of appreciation have encouraged me in my endeavor to live close to the views expressed in the first catalogue I ever issued. "I believe that the purchase of a package of seeds, however small, involves a trust to which seedsmen should honorably respond," By adhering to this policy our trade has not only increased from year to year but has multiplied over and over. Last year, 1913, our business struck it's highest mark, and great it was! Orders poured in upon us by the thousand and tens of thousands and no seed firm on earth ever had more cause to feel thankful to its tens of thousands of patrons than we. The reason is this. Each and every one of our patrons is our friend, not only in name, but in truth. This we experienced the past summer and fall in it's fullest measure when we were called on business trips to the South, Texas, Oklahoma, Louisiana, Mississippi, Alabama and Georgia and from there to Philadelphia and New York and back through the middle western states. Everywhere we went on our travels without exception, we were cordially greeted, — heartily by our patrons, and words often failed us to express our keen appreciation. No matter where we went or where we stopped we found patrons of the Ratekin Seed House, and everywhere we found a patron we found a whole-souled friend. Often, very often, we heard expressions like this: "How are you Mr. Ratekin. I want you to come to my house, plantation, farm or ranch and see what a wonderful crop of corn, oats or vegetables we have grown from the seeds we got from you. My wife will get up a good dinner and will be pleased to show you her garden and flowers raised from the seeds we sent to you for."

IT IS EASY TO ORDER YOUR SEEDS FROM US.

NOTHING could be made easier, more simple or more profitable than we have made it to our customers to order their seeds from us. You are just as safe in ordering your seeds from this catalogue as if you were to walk into our seed house or any other place where seeds are kept for sale and select out the seeds you wanted. All you need to do is to read the next page of this book and follow out the suggestions there made, or write us in your own way and language. We receive letters written in all languages, and have employes who can read every language known, and from people of every walk in life. As a matter of fact the chief and only art of letter writing is to briefly express yourself in your own way and your own language sufficiently to let us know what you want. That's the whole secret and all there is to it. The most finished literary production conveys or tells no more.

YOU ARE TAKING NO CHANCES in ordering your Seeds from the RATEKIN'S SEED HOUSE.

A GUARANTEE THAT MEANS SOMETHING: We guarantee that every article purchased from this catalogue shall be exactly as represented and all orders and shipments are made with the distinct understanding, and agreement that purchaser is to have the privilege of examination and anything not found as represented or entirely satisfactory shall be returned to us at our expense, when order will be duplicated or purchase price refunded, at option of purchaser. We, however, in no case give any warranty, express or implied as to description, purity or productiveness of any seeds sold or sent out by us and will in no way be responsible for resultant crops after seeds have been planted or sown as there is so many conditions with which we have nothing to do, involved, after seeds are planted. If purchaser does not accept seeds on these conditions they must be returned to us within ten days from time received. This gives ample time for inspecting, trying and testing in any way purchaser may desire, but we cannot return money or duplicate order for any seeds that have been held in hands of purchaser longer than ten days from time received. We make every effort to fill orders same or following day received, but if you wish us to hold order in our seed house until planting time, kindly advise us to that effect. Receipt of all orders acknowledged by first mail.

Truly and sincerely yours,

A large, stylized cursive signature of J. M. Ratekin.

Manager.

RATEKIN'S SEED HOUSE
SHENANDOAH, IOWA

Room for the rest of the order on the other side.

Terms and General Information About Ordering

I Want You to Have Confidence in Our Way of Doing Business

We want and ask you to read every page of this catalogue over carefully and compare our prices for pure new crop grown seeds with others.

We are here to please and serve you! Again we ask you to please read carefully before sending in your order.

OUR TERMS ARE STRICTLY CASH WITH ORDER

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 RESPONSIBILITY

As this book will probably go into the hands of hundreds and thousands of people who are unacquainted with us this question will naturally arise, and in answer to the same we take pleasure in referring you to the Shenandoah National Bank, the Security Trust and Savings Bank, the Mayor, Postmaster, Adams or Wells-Fargo Express Agents, or any business house or any other person whatsoever in this city.

WHAT WE GUARANTEE

That all money sent to us for seeds shall reach us if sent us 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 good 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 catalog 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 within ten days from the time received. This gives ample time for inspection and testing as to vitality. 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.

WHAT WE PREPAY POSTAGE ON

We pay postage or express charges on all vegetable, flower and other seeds quoted by packet, ounce, or pound; one-half pint, pint and quart, and guarantee safe delivery at any postoffice in the United States. If such seeds, however, are to be sent inside of a sack of heavy field seeds to go by express or freight at expense of purchaser, you may deduct at the rate of 8 cents per pound from regular catalog price for any vegetable or flower seeds contained in the order.

CHARGES NOT PREPAID

All seeds sold by peck or bushel or other than pound prices, including Farm, Field and Grass Seeds, etc., are sent by freight or express, as may be directed, at purchaser's expense. Boxes and bags free with all shipments of Seed Corn, Oats, Barley, Speltz and other grain. For sacks for grass seeds add 20 cents extra for each bag. Ear field corn weighs 70 lbs. per bushel; shelled corn, 56 lbs. per bushel.

DELIVERY

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

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.

SMALL ORDERS

It matters not what you want in the seed line, nor how large or small your order, we shall be glad to hear from you, and your orders will have our prompt and best attention, and we will otherwise try to serve you in a manner that will please you.

MARKET GARDENERS

and others who buy vegetable and flower seeds in bulk to amount of \$5.00 or over are requested to make out a list of their wants and requirements and send them in, when we will make them lowest special prices on large orders. In short, we want to hear from everyone who receives this book, and you may always depend upon receiving the most courteous treatment.

FREIGHT CHARGES MUCH LESS THAN YOU EXPECT.

Through a great bug-a-boo and misunderstanding about the cost of transportation charges, largely due to misrepresentations 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 good round profit on it, which you can save and otherwise get the benefit of by sending you order direct to us. **THE FREIGHT RATE IS THE SAME TO HIM AS TO YOU.** Thus you save the exorbitant profit, both on first cost and freight, and have the assurance of getting new, fresh seeds direct from the grower.

How to Figure Freight Rates.

Rates are based on a minimum charge and on the basis of so much per hundred pounds. A minimum rate or charge is the least amount for which a 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 through 100-pound rate. For this reason and in order to obtain the cheapest and lowest classification a freight shipment should always weigh at least 100 pounds. Less shipments will usually go on a basis of minimum charge.

Express Rates and Charges.

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 on a railroad can be reached from Shenandoah within sixty hours and less from time shipment is started, and if you are in a hurry and shipment is small the express system is the best one 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.

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

ALABAMA.		ILLINOIS.		KANSAS.		MISSOURI.		OHIO.		MILAN.	
Birmingham	\$.54	Centralia	\$.34	Concordia	.39	Delta	\$.52	Chillicothe	\$.48	Nashville	\$.45
Montgomery	.54	Canton	.30	Atchinson	.20	Dexter	.62	Cincinnati	.45	Memphis	.39
Fruitdale	.57	Chicago	.32	Garnett	.39	New Madrid	.56	Cleveland	.47	Gallatin	.50
Mobile	.47	Aurora	.32	Ft. Scott	.32	Malden	.65	Columbus	.45	Hartsville	.51
Tuscaloosa	.54	Bushnell	.27	Gt. Bend	.63	Carrollton	.20	Dayton	.42	Frankfort	.48
Decatur	.54	Beardstown	.27	Leavenworth	.20	Cameron	.20	Defiance	.44	Maysville	.49
Selma	.55	Galesburg	.77	Beloit	.49	Kansas City	.20	Lima	.45	Paris	.54
ARIZONA.		Galva	.30	Parsons	.32	Laclede	.27	Portsmouth	.46	Union City	.74
Phoenix	2.30	Litchfield	.34	Wichita	.55	Maywood	.27	Toledo	.45	Jackson	.89
Prescott	2.30	Monmouth	.27	Newton	.51	Napier	.15	Xenia	.45	TEXAS.	
ARKANSAS.		Ottawa	.32	Topeka	.30	St. Joseph	.15	Youngstown	.48	Dennison	1.15
Hoxie	.63	Peoria	.30	Manhattan	.38	Osborn	.20	Eldorado	.42	St. Joe	1.15
Hope	1.06	Quincy	.27	Emporia	.43	St. Louis	.27	Newark	.47	Minneota	1.15
Fort Smith	.69	Rock Island	.27	Winfield	.60	Hannibal	.27	East Mandale	.50	Dallas	1.15
Parragould	.70	Savanna	.27	Oberlin	.66	Brunswick	.20	Versailles	.52	Denton	1.15
Blythedale	.70	Carthage	.27	Dodge City	.51	Boonville	.40	Pickway	.53	Ft. Scott	1.15
Brinkley	.72	Decatur	.30	Garden City	.65	Moberly	.27	Washington	.60	Hillsboro	1.25
Stuttgart	.76	Champaign	.32	Olathe	.32	Kirksville	.27	C. H.	.60	Temple	1.22
Little Rock	.65	Carmi	.42	KENTUCKY		West Plains	.47	Bluffton	.44	Georgetown	1.22
Pine Bluff	.76	McLeansboro	.40	Louisville	.42	Maryville	.15	Ironton	.47	Austin	1.22
Helena	.67	Sidell	.40	Madisonville	.48	Higginville	.40	Savona	.42	San Antonio	1.25
Bentonville	.50	Olney	.42	Hopkinsville	.44	Neosho	.45	Canton	.47	Galveston	1.22
Arkansas City	.60	Cairo	.49	Gracey	.44	Zanesville	.48	Sandusky	.46	Fayetteville	1.22
Texarkana	.89	Murfreesboro	.47	Hematite	.47	Akron	.47	Troy	.48	Houston	1.22
Fayetteville	.55	Bloomington	.32	Greenbrier	.49	Cisco	1.22	Henrietta	1.22	Brownwood	1.15
De Vails Bluff	.60	Paxton	.38	Beatrice	.32	Waco	1.22	Harris	1.15	Corsicana	1.15
Siloam Springs	.50	Jacksonville	.30	Owensville	.42	San Angelo	1.15	Abeline	1.15	Amarillo	1.22
De Queen	.86	Springfield	.30	Russellville	.50	Dublin	1.15	Okmulgee	.72	Stephensville	1.15
Ashdown	.86	INDIANA.		Bowling Green	.51	Beaumont	1.22	Chickasha	.82	Ogden	1.55
CALIFORNIA		Effner	.39	Lexington	.50	Enid	.82	Hugo	1.09	Salt Lake City	1.55
Los Angeles	1.40	Adams	.48	Lebanon	.50	Howe	.82	Portland	1.40	Manti	1.70
Sacramento	1.00	Albany	.46	Pembroke	.49	OREGON.		Salem	2.05	Bingham	1.55
San Francisco	1.40	Ft. Wayne	.43	Paducah	.55	PENNSYLVANIA.		Pittsburg	.50	Abingdon	.67
San Jose	1.40	Indianapolis	.41	Owensville	.55	Pittsburg	.50	Johnstown	.54	Lynchburg	.59
Redding	1.65	New Albany	.42	Hickman	.55	Weyertown	.59	Philadelphia	.60	Richmond	.59
COLORADO.		Terre Haute	.38	Henderson	.52	Bedford	.59	Gettysburg	.59	Clarksville	.67
Denver	.74	Huntington	.42	Cynthiana	.52	Erle	.50	Scranton	.60	Virginia City	.55
Greeley	.75	Vincennes	.37	Ashland	.52	Gettysburg	.59	Blairsville	.59	West Virginia.	
Pueblo	.75	North Vernon	.41	LOUISIANA.		Lewisburg	.59	Richmond	.59	Clarksburg	.51
Kit Carson	.75	Muncie	.42	Shreveport	.98	Providence	.65	Grafton	.52	Deer Park	.59
Trinidad	.75	Lafayette	.40	Pearl River	1.06	Woonsocket	.65	Parkersburg	.50	Wausau	.32
Leadville	1.40	Evansville	.45	New Orleans	.92	Chippewa Falls	.47	WYOMING.		Cheyenne	.75
Ft. Morgan	.74	Martinsville	.45	MARYLAND.		Laurel	.59	Evanston	1.55	Evanston	1.55
Holyoke	.73	Greencastle	.42	Baltimore	.59	Watertown	.45	Rawlins	1.55	Laramie	1.55
Boulder	.74	Valparaiso	.43	Cumberland	.59	Pierre	.60	Deadwood	1.32	Wheatland	1.70
Brus	.74	Frankfort	.41	MICHIGAN.		Radic City	1.28	Princeton Jct.	.47	Tacoma	2.61
CONNECTICUT.		Michigan City	.44	Jackson	.54	Tenn. Ridge	.51	Pond	.51	Spokane	2.46
Bridgeport	.65	Goshen	.43	Adrian	.48	Fargo	.59	Bear Springs	.45	Pasco	2.64
Hartford	.65	IOWA.		Bay City	.48	Bismark	.81	Grand Forks	.65	Seattle	2.61
New Milford	.65	Hamburg	.08	Detroit	.48	N. CAROLINA.					
Litchfield	.65	Carson	.10	Grand Rapids	.48	Charlotte	.65				
New Haven	.65	Clarinda	.08	Kalamazoo	.48	Fayetteville	.59				
Waterbury	.65	Cumberland	.13	Lansing	.48	Washington	.65				
CANADA.		Council Bluffs	.10	Ann Arbor	.48	Wilmingon	.60				
Chatham	.57	Chariton	.14	Brown City	.51	NEW YORK.					
Bothwell	.50	Clinton	.27	Chippewa	.53	Rochester	.58				
St. Thomas	.50	Creston	.11	Emmett	.49	Churchville	.58				
Toronto	.50	Albia	.16	Manisteeque	.57	Syracuse	.61				
Montreal	.62	Burlington	.22	Cadillac	.52	Utica	.63				
Quebec	.68	Des Moines	.16	MINNESOTA.		Rotterdam Jct.	.64				
London	.49	Griswold	.09	St. Charles	.32	Cornwall	.66				
DELAWARE.		Humeston	.13	St. Paul	.32	New York City	.66				
Dover	.62	Ottumwa	.17	Blue Earth	.32	Mohawk	.63				
Farmington	.62	Sioux City	.19	Fairmont	.32	Troy	.60				
Newark	.60	Manning	.25	Rocheater	.32	Buffalo	.49				
Wilmington	.60	Coon Rapids	.26	Wauseka	.32	Albany	.60				
GEORGIA.		Tama	.34	St. Paul	.32	Poughkeepsie	.62				
Atlanta	.54	Oskaloosa	.18	Blue Earth	.32	Binghamton	.61				
Brunswick	.55	Marshalltown	.22	Fairmont	.32	N. CAROLINA.					
Savannah	.55	Hampton	.25	Fairbault	.32	Charlotte	.65				
Macon	.56	Storm Lake	.30	Duluth	.32	Fayetteville	.59				
IDAHO.		Cedar Rapids	.38	MISSISSIPPI.		Washington	.65				
American Falls	1.50	Rockwell City	.26	Corinth	.95	Wilmingon	.60				
Boise	1.80	Spencer	.31	Tunelo	.97	NORTH DAKOTA.					
Spencer	1.45	Jefferson	.24	Aberdeen	1.01	Fergus Falls	.55				
		Sac City	.28	Meridan	.97	Bismark	.81				
		Davenport	.27	Okolona	1.00	Grand Forks	.65				
		Dubuque	.27	Artesia	1.01						
		Emmettsburg	.32	Starkville	1.01						

Where We Are Located

SHENANDOAH is located in Southwestern Iowa, twenty miles from Nebraska, and same distance from the Missouri line, in the rich, fertile valley of the Nishnabotna River, and is noted far and wide as the greatest corn growing district in the world and where corn attains its greatest perfection. This is no idle boast. The claim is not only established but conceded by all who have ever made a trip down this beautiful valley—the Egypt of America. Bayard Taylor, the famous poet, author, journalist and traveler, crossed this part of the country years ago, before Shenandoah existed and when this part of Iowa was unbroken and almost uninhabited. At that time Mr. Taylor gazed across the valley of the Nishnabotna and declared the landscape was the most beautiful his eyes ever beheld. He called it the garden spot of the world. The rich soil extends four, six and eight feet in depth, full of life-giving qualities that make the monster crops it grows.

SHENANDOAH is located 485 miles almost due west of Chicago, on the Chicago, Burlington and Quincy Railroad, 366 miles northwest of St. Louis and fifty miles southeast of Omaha and Council Bluffs on the main line of the Wabash Railroad, and 150 miles north of Kansas City and ninety miles from St. Joseph, being also the terminus of the Keokuk and Western Railroads; thus we have the benefit of three trunk lines reaching all the leading cities and railroad centers of the country direct. This county attained the fame of producing more corn—area considered—years ago, than any other territory in the world. Twenty-two by twenty-four miles square, produced **SIX MILLION, TWO HUNDRED THOUSAND, SIX HUNDRED AND THIRTY-TWO BUSHELS OF CORN** as shown by the United States census report—over three hundred and twenty bushels of corn for each man, woman and child resident of the county. This equaled the combined production of corn of the following states: Massachusetts, Maine, Connecticut and Rhode Island, and in addition equal to more corn than any one of ten other states.

GENERAL OFFICE, ELM AND VALLEY ST.

The Beautiful Nishna Valley of Southwestern Iowa

what I have already said I cannot resist or refrain from giving some further impressions that come to me about our natural facilities. There may be more beautiful valleys than the Valley of the Nishnabotna. Not having traveled all-over the world I do not know, but I have traveled over much of the United States. I have heard travelers who have made the trip around the world and visited about every country on the face of the globe rave over the beauties of rivers and streams in foreign lands. But I did not know whether they were telling the truth or just blowing off, and neither does it make any difference for this occasion.

I do know, and that is all that really concerns this subject, that this is the natural home and greatest corn growing locality to be found in the world; where corn attains its greatest perfection. Owing to this fact corn is the chief product of our farms and farmers. For these reasons, if for nothing else, it's the place where corn has been nurtured and brought to its highest perfection.

The Nishnabotna country is as fertile as the Valley of the Nile, and we have the richest, wealthiest class of farmers here to be found in any place I have ever seen. Corn was the foundation of all this wealth, not that they hauled the product to the railroad stations and sold it, but wherever corn is grown in abundance the farmers have a lot of stock, horses, cattle and hogs about them and are thus enabled to get the benefits of all the by-food products out of it, and in lieu of paying freight on ten or twenty carloads of grain from their year's crop it is condensed into beef, pork and fine horses. Thus instead of being ten to twenty cars to pay freight on there is but five or six, as the case may be.

J. W. RATEKIN.

PROF. P. G. HOLDEN of the **IOWA STATE AGRICULTURAL COLLEGE** at Ames, Iowa, says: "I went to the corn fields of one hundred farmers in Storey County, Iowa, where the farmers were in their fields planting corn, and took a quantity of seed corn, such as they were planting, from one hundred different corn planter boxes, and took it to the grounds of the State Experimental Station of the Iowa Agricultural College, and planted it on our trial fields. Some of it made **ONLY TWENTY BUSHELS, WHILE OTHER LOTS YIELDED ALMOST ONE HUNDRED BUSHELS PER ACRE.** This wide difference **WAS ALL IN THE SEED AND VARIETIES.** The land and cultivation and other methods all being identically alike. The expense of growing was the same. The **BEST SEED AND VARIETIES** produced fully **FOUR TIMES AS MUCH CORN** of better quality than did the other lots of **INFERIOR SEED.**"

REMEMBER—In Counting the Cost of Seed Corn

One bushel of corn will plant seven to eight acres! The cost per acre for our pure bred varieties is but 25 to 40 cents per acre! Only one bushel per acre increased yield more than pays all cost of seed. The commonest mongrel scrub corn costs you something. The corn we grow and sell you is not only selected seed, but is pure bred and has been carefully handled, dried and cured as seed corn should be.

A bushel of seed corn that increases your yield ten bushels per acre makes you at the rate \$40.00 per bushel. Hence, don't forget that if you plant seed that lowers your yield this much or more it has cost you \$40.00 to \$50.00 per bushel.

STOP! LOOK! READ!

CORN---Its Importance and Value to the American Farmer

The Importance of the corn crop of the United States is shown by the fact that of 176,000,000 acres devoted to all kinds of grains grown, 94,000,000 acres, or more than 53 per cent of all, is devoted to corn alone, the value of which averaged on a five years' stretch \$1,116,000,000, about two times the annual value of the cotton crop, and twice as much as the wheat crop of this country during the same period, which were next in their order to the corn crop. Thus it will be observed that corn is the leading crop of the United States. I might here add that three-fourths of all the corn grown in the world is produced in this country. Yet it is a humiliating fact that with proper cultivation the same number of acres could be made to produce twice as many bushels as are now being obtained, and I believe you will agree with me when I tell you the average yield per acre during the years I speak of was but 24 09, and when we consider that many hundreds and thousands of farmers grow an average of fifty to ninety bushels per acre, and in some isolated instances from 100 to 200 bushels per acre it stands to reason that there is very much of the corn crop that falls largely below the average.

Doubling The Yield Per Acre is the problem we are all up against. We have made the growing, breeding and selling of seed corn a specialty for thirty years, during which time we have experimented in every scientific way in improvement and perfecting the varieties we first started with. Meantime we have originated and propagated some of the best new varieties that have ever been introduced, descriptions of which will be found on the following pages, and we ask that you read them over carefully. Some varieties of corn are especially adapted to one locality, while they are unfit for another place, where seasons, climate, soil and altitudes are entirely different. In our experience, without boasting, as some seedsmen do, we feel it a safe and conservative statement to say we have handled and sold more seed corn each year than any other growers in the United States, sending our seed, both wholesale and retail, to every state in the Union where corn is grown, and by reason of this we have obtained the experience of more than a hundred thousand farmers and planters who have planted their crops from our seed. In this way and from actual practical experience of these farmers and corn growers we are able to materially

assist our customers in their selections of varieties best suited to their conditions and requirements, and are more than glad to do so. When in any way in doubt, if you will write us we will gladly assist you in any way we can. **GOOD SEED CORN** is not "all" in obtaining big yields, but without **GOOD SEED AND VARIETIES** to start with you cannot expect to obtain the full fruits of your effort and labor.

Good Seed Corn

THOROUGHbred HIGH YIELDING VARIETIES CANNOT BE BRED UP AND PRODUCED IN ONE YEAR. It requires time, practical knowledge and experience. A step year by year, "SLOW BUT SURE," but when you order your seed from us you get the benefit of our thirty years' experience breeding seed corn. **WE ARE THE OLDEST AND LARGEST SEED CORN GROWERS IN THE WORLD.** Ratekin's "famous" Iowa grown seed corn is known and planted from the Atlantic to the Pacific and from the Gulf to Canada. **WE BEGUN THE SEED BUSINESS TO STAY.** Others have tried to imitate us, but many of them have come and gone. **WE ARE STILL HERE,** but could not stay if our seed and representations did not bear us out in our claims. "SATISFACTION GUARANTEED OR MONEY BACK" is our motto.

YOU TAKE NO RISK as to our integrity or financial responsibility, we refer you to any bank or business house in this city, or you can ask your banker to look us up through any of the commercial agencies. You run absolutely no risk in dealing with us. **WE GUARANTEE** all seeds listed in this catalog **TO BE PERFECTLY SATISFACTORY AND EXACTLY AS REPRESENTED.** YOU ARE TO BE THE JUDGE AND JURY, AND IF ANYTHING IS NOT FOUND AS REPRESENTED, IT MUST BE RETURNED TO US AT OUR EXPENSE WITHIN TEN DAYS FROM TIME IT REACHES DESTINATION, WHEN PURCHASE PRICE WILL BE IMMEDIATELY REFUNDED. **WE ARE HERE TO PLEASE YOU. ONE WELL PLEASED CUSTOMER IS WORTH MORE TO US THAN A DOZEN DISPLEASED ONES!**

What is Good Seed Corn? Method of Selecting and Handling

To Be First Class Seed Corn

it should be a standard variety of superior quality in yield—early and sound maturity—corn that has demonstrated its ability to outyield other strains of the same variety. It should show a high percentage of germination, thus insuring an even and perfect stand. It should be purchased from a practical and scientific corn breeder, one who possesses a knowledge and experience in the growing and judging, as well as the preparation of seed in all its details.

THIRTY YEARS HAVE COME AND GONE SINCE WE FIRST began the breeding and growing of thoroughbred seed corn as a business. Years before, however, as a practical farmer and corn grower, we learned there was as much, even ten times more profit for the time and money invested and spent in the selection of thoroughbred seed corn as there was in selecting a herd of horses, cattle or hogs to start from, besides the returns are immediate from your corn crop, while it takes two, three or four years' time, care and patience before returns begin to come back from your thoroughbred herd, and even then in a comparatively small way as measured by your annually increased yield of corn from your acres.

We feel it not improper at this time in this our thirtieth annual catalogue, to present a summary of what we have accomplished along the line of corn breeding and corn improvement during these years. To do this we believe illustrations from real photographs and bona fide statements from a few only of the thousands of farmers who have been planting our seed corn for the past ten, twenty and twenty-five years will better tell the story than any words spoken by us. Hence we will use as many of these illustrations and testimonials as space will admit. **THEY TELL THEIR OWN STORY IN THEIR OWN WAY.**

YOU CAN'T GO WRONG BY PLANTING OUR HIGH BRED TESTED SEED CORN.

We realize that by far the most important question that comes before the farmer each year is his seed corn. It has always been our aim and purpose to help and aid him in this particular matter. It is indeed gratifying to know that we have succeeded, as is shown by thousands and tens of thousands of letters we receive annually, coming from every state in the Union, all bearing evidence to this effect. Located as we are in the best corn and seed corn growing district to be found under the shining sun, we have spared no effort to grow only the most valuable and prolific varieties—varieties not only adapted to the requirements of the farmer, but different varieties best adapted to the latitude intended for, and as stated in preceding pages, if after reading the descriptions of different varieties you are in doubt write us and we will gladly help you with any information we can. **WE GROW AND SELL MORE SEED CORN THAN ANY TEN SEED CORN GROWERS or SEED HOUSES COMBINED IN IOWA,** and at the end of every season send out many thousand inquiries among our customers in different states who have planted different varieties under varied conditions, thus obtaining the experience of thousands of farmers, all of which is at the command of our customers when we can be of service to them.

The United States Department of Agriculture says, in a recently issued year-book, that properly grown, selected seed corn, well bred, usually produces fifteen bushels more per acre than ordinary unselected corn. This statement is based on tests carried on on a large scale, covering many years.

The actual cost of good pure bred seeds is the smallest item of expense in the growing and production of the crop, and when results are known the cost of good seeds is an asset rather than an expense. Especially is this so when applied to seed corn. It isn't what a thing costs; it is what it returns to the purchaser. It has been proven and demonstrated by thousands of our customers all over the United States wherever corn is grown that results are the same—that our pure high bred varieties of seed grows crops that outyield ordinary sorts of corn from ten to forty bushels per acre, and in some instances even more than the latter figure.

How Our Seed Corn Is Handled

Naturally every farmer or customer who sends away for seed wants to know how our seed corn and crops are handled after it is grown and garnered. This is an important question.

First of all, our crops are allowed to remain in the field on the stalk as long as weather conditions will admit, in order that the ears may have the full benefit of Nature's process of drying, which is the best method for curing corn that has ever been devised. But when the time comes to get it in everything else is made secondary to that end, and every bushel husked each day goes into our corn house before we sleep. As fast as it comes in it is shoveled into slat bottom bunks, built especially for this purpose, so that every ear can be observed, and here we have a small army of men, experts in the business, to go over it, sorting it out ear by ear, selecting only the well-developed and best matured ears, which is conveyed to our regular repositories. The refuse, culls, shelled corn, silks and husks stripped from the select ears is cleaned up, shelled and sold on the market. Thus we are able to economize space and all our storage room for choice ears only. Ordinarily we reserve from 15 to 25 per cent of the first sorting. But when the time comes for shelling and shipping out, usually commencing about January 1st, as we supply many of the leading seed houses and seedsmen of the country with their seed, **WE AGAIN GO OVER EACH AND EVERY EAR THE SECOND TIME, RIGIDLY INSPECTING EACH AS TO VITALITY, THE BUTT AND TIP ENDS BEING TAKEN OFF BEFORE SHELLING** for shipment. Meantime our seed corn, before the second inspection and resorting, is kept in thoroughly ventilated houses, ventilated at the bottom, from sides to end. To do the cleaning and grading we have machinery specially built for this purpose, and when we say we have the best equipment that money will buy or to be found in any seed house in America we believe we are not overstating the facts. After shelling all grain and seeds pass over a cleaner, where it is cleaned and fanned. Then it is conveyed to our new process cleaner and grader, which makes five different separations—extra large kernels, small undersized, extra thick and extra thin, and, fifth, the graded seed corn, similar to illustration, shown on next page. We have been told a thousand times that the way we clean and grade our Seed Corn, Wheat, Oats, Barley and Grass Seeds make it alone worth twice as much as the same quality of seeds cleaned on ordinary mills. **OUR AMBITION IS TO SEND OUT NOTHING BUT WHAT WILL GROW AND OF THE HIGHEST GRADE AND QUALITY.**

The World's Greatest Yielding White Corn.

YIELD PER ACRE OF MOST BUSHEL'S GOOD SOUND CORN

The essential point in which the practical farmer is interested is the most bushels of good, sound, solid corn to the acre. The score card, the corn shows, and competitive judging are all good and have their place in awakening an interest in better and more profitable corn growing, but the commercial corn growing farmer should not allow himself to become too greatly absorbed in ideal ears, unless they can show by some authenticated records prepotent power of reproduction. In many, of not most, 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 was 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 farmer's institute, state or national corn show, and if 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 back 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 strains of inherent 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 who plants and grows corn for feeding and commercial purposes wants, is seed corn that will grow and varieties that will give him the most big bushels of good, sound, solid corn to the acre, containing protein that contains the most nutritious and fattening qualities, and sells at best prices on the market and to feeders.

The above illustration shows what a good farmer can do.

Plymouth County, Mass., March 15.
Ratekin's Seed House, Shenandoah, Iowa.

Gentlemen: You sent me some fine seed corn again last spring, "Diamond Joe's Big White," and I got a perfect stand, the best I ever had, but a hailstorm came along and put my corn crop off the map. I am, however, going to try for 150 bushels per acre this year, and expect to make it if I get as good a stand as last year. This is pretty big talk, but you will remember that I GREW THE PRIZE WINNING CROP AT THE GREAT NEW ENGLAND CORN SHOW three years ago, and was AWARDED \$100 IN GOLD for the LARGEST YIELD per acre in the contest of all the New England States. That year I grew an average of 132½ bushels per acre shelled corn from Diamond Joe's Big White I got from you. Please ship my order at earliest convenience and oblige very truly yours,

A. WEBSTER BUTLER.

Tremont, Ill.

Gentlemen: I would like one of your catalogues as soon as I can get it. I want some seed corn. I sent to you some years ago for seed corn, and it was as fine as any seed I have ever seen. I don't believe there was a kernel that didn't grow. In fact, I was surprised at how well it came. Very truly yours,

JOHN DAY.

Baltimore City, Md.

I have read your catalogue and planted your seed since 1907, and I am now raising 200 bushels of corn per acre. Please send me your 1914 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.

Lincoln County, Okla., Feb. 10.

Gentlemen: I am pleased to tell you that your Diamond Joe's Big White makes good, rain or no rain. I planted the seed got from you in good time, but we had it extremely dry here. Never had but one rain from time it came up until it was too late to be of benefit to corn, yet it made a good crop; about three times as much per acre as our best native sorts. Anyone could go into the field and tell to a row and to the last hill where Diamond Joe was planted. I shall plant no other variety this year. Truly yours,

JAMES F. JORDON.

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 fifty pounds, which is perhaps the largest yield of corn ever known in this community. Mr. Dale says the moles took many of the seed, and but for this fact the yield would have been even better.

The corn is white, long, even ears, and is known as "RATEKIN'S DIAMOND JOE." The ground was in good order for planting but no extra work was done in the way of cultivation.—Mitchell (Indiana) Tribune.

Detroit, Mich.

Gentlemen: From half bushel of Diamond Joe's Big White got from you last spring I planted three acres and obtained a trifle over THREE HUNDRED BUSHEL'S of corn. I might add that we had the worst drouth known in this part of the country. I planted May 15th, matured and harvested October 1st. Very truly yours,

CHARLES C. SCHNEIDER.

Diamond Joe's Big White

LARGEST EARED, EARLY MATURING CORN IN THE WORLD

Has a Record of Over 200 Bushels Per Acre

The Above is a True Photograph of Select Ears; Diamond Joe's Big White

Diamond Joe's Big White.

Ratekin's Diamond Joe's Big White

Has Captivated The Entire Corn World

Everywhere tried and tested, north, south, east and west, it has proven a wonderful success, producing enormous yields and maturing as early as the earliest varieties. We have grown it more extensively than any other white variety for the past five years, increasing our acreage more and more each year, but every year have sold out before planting season was over. All who have been fortunate enough to secure and plant this corn have won a prize by doubling their yields. In fact, it would make one gasp with astonishment to see and read the hundreds of letters and reports we have received from those who have planted and grown crops from it. Many of the reports are almost unbelievable, while all are loud in their praise. On this page will be found a few only of the hundreds of similar letters we have had from our customers, and, strange to say, we have never had a complaint from a customer after his crop was made.

DESCRIPTION: Stalks are large, strong and robust, growing to a height of 8 to 12 feet, dependent upon the land; very deep, heavy root, almost equal to sorghum or broom corn, thus a great drouth resister; broad blades and many of them; ears 8 to 12 inches long and 7 to 8 inches in circumference; 16 to 20 rows, deep grains, solidly set on a medium size cob; cobs white. This corn has been carefully bred with an eye single to yield and early maturity, not for show purposes, every stalk producing one to three good ears. It is not only adapted to good, strong ground, but will do better and return larger yields on old, poor, thin or hilly ground than any other variety in existence. In short, it is the embodiment of all the good qualities contained in all the best varieties. It's the sure thing—all we claim for it. Our seed stock of this corn is exceptionally fine this year (extra choice), having been grown from absolutely pure seed stock, and we have made a selection of the most choice ears, and hope to be able to fill every order promptly that comes to us this year.

Points of Supremacy Over Other Varieties.

1. It is pure and a distinct variety.
 2. It is a strong, vigorous, robust grower from the start.
 3. It is absolutely free from barren stalks, every stalk bearing one or more well developed ears.
 4. It is very early to mature, making itself anywhere in 100 days or less.
 5. It will thrive and do well in extreme drouth, when other varieties fail.
 6. "DIAMOND JOE'S BIG WHITE" is a superior variety of corn from every point of view. 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.
- PRICES:** Sample ear, postpaid, 25c; 1 lb., postpaid, 25c; 3 lbs., 70c; 7 lbs. (enough to plant one acre), \$1.00; pk., 75c; ½ bu., \$1.40; 1 bu., \$2.50, 2 bu., \$4.75; 5 bu. and over, \$2.25 per bu. Bags included. f. o. b. Shenandoah. If wanted in ear or box, add 75c per bushel to foregoing prices.

Solon, Iowa, May 1st, 1912.

Gentlemen: I see by my paper that you are still in the seed corn business. I sent to you seven years ago for seed corn and got the best corn that I have ever grown. I am in need of seed corn for the coming season. Please send me your catalogue by return mail. Very truly yours,

JOE LENOCH.

Hartington, Neb., April 28, 1912.

Gentlemen: I sent to you twelve years ago and got the best seed corn I have ever planted, but will have to buy seed corn this year. Please send me your catalogue and let me hear from you at earliest convenience. Truly yours,

GEO. W. DEMIRST.

Clark County Mo.

Gentlemen: The Diamond Joe's Big White I got from you made a remarkable record for me. Practically every grain grew and every stalk produced from one to two good ears, greatly increasing the yield over other varieties. Enclosed find my order for seed for the coming season. Truly yours,

ROSCOE G. THOMPSON.

Lowell, N. C.

Gentlemen: In 1910 I sent to you for some of your Diamond Joe's Big White, and it has proven the finest corn that was ever grown in this locality, but I unfortunately lost seed from it and want to send direct to you for seed the coming season. Please send me your catalogue. Respectfully yours,

MRS. J. B. ABERNATHEY.

Lanasco, Texas.

Gentlemen: I sent to you for some Diamond Joe's Big White three years ago, and I was well pleased with it. Never have found any variety of corn that has given as good results, but lost my seed and I am herewith enclosing you an order for four bushels of this variety. Kindly ship prompt on receipt of this order. Truly yours,

I. B. J. SILER.

Moro, Ill.

Gentlemen: Please give us your best prices on seed corn. We have handled your seed for the past two years and planted it on our own farms and have obtained splendid results. Give us best dealers' prices. Very truly yours,

LANTERMAN BROS.

Hunt County, Texas, Feb. 21st, 1913.

Gentlemen: Please send me a copy of your 1913 seed catalogue. I have planted your Diamond Joe's Big White Corn here for the past four years, and have never found anything that has given as good results. My seed has become mixed with other varieties and will want new seed this year. I could buy seed here cheaper, but prefer sending direct to you for my seed, as I always get much better results from your seed than from seed purchased from our local dealers. Very truly yours,

SILAS D. LACKEY.

"LISTEN TO THE PEOPLE"

And You Will Seldom Go Wrong

WHAT THEY SAY ABOUT "DIAMOND JOE'S BIG WHITE"

Emerald, Neb., March 10th.

Gentlemen: I ordered my seed from you last year, including some Diamond Joe's Big White, and think it the best investment I ever made. Send me your 1912 catalogue by return mail, as I will want seed again this year. Truly yours,
G. C. DEINERT.

Rock City, Ill., March 12th.

Gentlemen: The seed corn you sent me was fine, and I am enclosing herewith another order. Truly yours,
ROBERT MARSH.

Winnleywood, Okla., March 2.

Gentlemen: I have received the seed corn ordered from you and I am well pleased. It looks good to me. Truly yours,
S. W. ALLEN.

Albion, Iowa, Feb. 23.

Gentlemen: Five years ago I sent to you for seed corn, and from it I have each year obtained splendid results. I like it so well I want to give you another order if you are still engaged in the seed trade. Please send me a copy of your 1912 catalogue at earliest convenience. Very truly yours,
MRS. BELLE HOBBS.

Brookville, Fla., Jan. 26th.

Gentlemen: The Diamond Joe's Big White seed corn I got from you has proven a great success. It even did better and made better than you claim for it. Send me a copy of your catalogue by return mail, as I shall want a good quantity of seeds of various kinds as quick as I can get them. Truly yours,
M. S. ZIMMERLY.

Ashdown, Ark., Feb. 10th.

Gentlemen: I have just moved here from Missouri. Before coming here I planted your Diamond Joe's Big White in Missouri with splendid results. Will want enough to plant my crop here this year. Please send me your catalogue by return mail. Very truly yours,
E. F. FIX.

Osceola, Mo., Feb. 13th.

Gentlemen: I have planted and grown crops from your Diamond Joe's Big White for the past two years and find it everything you claim for it. Please send me your 1912 catalogue. Truly yours,
C. C. LAIR.

Bronte, Texas, Feb. 3rd.

Gentlemen: I am sending to you for some Diamond Joe's Big White seed corn. I have planted your Diamond Joe's Big White in North Texas for a number of years. It ripens and matures there three to four weeks earlier than any of the ordinary native sorts. In fact, was always in roasting ear when the native varieties begun to tassel. Rush seed along. Very truly yours,
O. C. IVEY.

Canile, Ariz., March 1st.

Gentlemen: Please send me a copy of your 1912 catalogue and give me best prices on two bushels of Diamond Joe's Big White. I have planted this corn here with excellent. An early reply with your catalogue will be appreciated. Very truly yours,
WM. E. BOWER.

La Flore County, Okla., Feb. 17th.

Gentlemen: The Diamond Joe's Big White I got from you last year came to the front in excellent shape, although we had a very severe drouth. I made as much per acre from it as lots of my neighbors made from twenty acres planted from native sorts. Truly yours,
C. A. COATE.

Lytle, Colo., March 9.

Gentlemen: I live fifteen miles southeast of Pike's Peak and nineteen miles from Colorado Springs. I have been planting your Diamond Joe's Big White corn here for a number of years, and am well pleased with it, but have always received my seed a little late and have not been able to plant as early as I would have liked, but it has done remarkably well. I am sending you an order for 3½ bushels of this variety, and hope you will give it prompt attention. I want to get my seed and have it at hand when conditions for planting are good. Rush it along. Yours very truly,
W. C. DOCKUM.

Pontiac, Mich., Feb. 14th.

Gentlemen: I have had such wonderful success from the seed corn that I bought from you last year I feel confident my neighbors will want a lot of seed corn this year, and if you can supply us will be glad to hear from you. Give me your best wholesale prices in quantity lots. Truly yours,
A. M. BUTLER.

Seed Corn---Best Varieties

The Best would doubtless apply to one variety, but in our many business years growing seed corn for the wholesale and retail mail order trade, we have originated and selected a large number of the leading and best varieties known or grown. Some farmers are infatuated with one variety, others may choose another. Some sorts are and may be especially suited to intended purposes, while others may be best suited or adapted to other requirements. For these reasons we shall endeavor only to bring out the characteristic points of each, leaving it to our customer to make his own choice. If, however, you are in doubt, write us and we will be glad to assist you in every way we can. **OUR THIRTY YEARS' EXPERIENCE** with that of a hundred thousand or more farmers scattered all over the United States who have planted our seed corn is at your command. **ALL OUR VARIETIES HAVE BEEN IMPROVED AND GROWN FROM THE BEST STRAINS**, and if there were other better or more popular sorts we surely would grow them here in this **GARDEN OF EDEN FOR GROWING CORN**.

Again, Is It Worth Its Cost?

The corn we sell is grown from seed which has been brought to such a degree of perfection on our seed farms as to render it of great value. It represents the labor of many years and an expenditure of a large sum of money. It has behind it the history of big crops. We know when you plant it, barring flood or drouth, it will yield heavily. Is this care worth a few cents an acre to anyone planting corn?

Corn and Cornology

It is a well known fact, long conceded, that the Nishnabotna Valley of Southwestern Iowa is noted as the world's most famous corn growing district, where corn has been brought to its highest perfection, capable of imparting a vitality that is retained wherever transplanted for a number of years. To prove this theory is only necessary to cite the fact that imported wheat, oats and other cereal crops from Russia, Turkey, Crimea, Sweden, Western Canada and other foreign countries have not only increased, but doubled our yields in this country. What's the explanation? It is because the seed was grown and imported from its natural home where propagated to the highest degree of perfection. Nowadays and since the practical progressive corn growers have blazed the way and made new discoveries, theoretical experts and cornologists have sprung up like hothouse plants grown overnight, who undertake to tell you more about seed corn and corn growing than the practical, successful corn grower learned in fifty years' experience on the farm.

Seed Corn and Varieties For Your Locality

Choosing varieties adapted to your climate, soil and latitude is a very important factor. A great many failures in sending away for seed corn are due to the customer's selecting the variety he thinks he wants instead of the corn that is best suited to his locality. In view of this I shall venture to make some suggestions that may help you in a general way in making your selections. Of course I realize that conditions often vary in the same state. For instance, between Northern and Southern Nebraska, Iowa, Illinois, Indiana and Ohio. Therefore you should take these suggestions in a general way. Practically any of the following varieties will be all right for the southern half of Iowa or in line or south of that latitude, east and west, from Western Nebraska to Eastern Ohio: Mammoth Iowa Yellow Dent, Boone County White, Reid's Yellow Dent and Wallace's Favorite are not safe for main crop further north, but should be grown on a small scale with a view of acclimation and selection of a type suitable for your climate. Yet under favorable conditions any of them will ripen and make enormous crops as far north as the southern Minnesota line, but for an absolute certain, well-matured crop we advise planting medium early varieties, such as Pride of Nishna, Iowa Gold Mine, Ratekin's Gold Standard 90-day corn, Queen of Nishna, Alaska Northwestern Dent, Diamond Joe's Big White, Iowa Silver Mine, Silver King, Wisconsin No. 7, and Pride of the North. For Missouri, Southern Illinois, Indiana, Ohio, Kansas and from there south to the Gulf coast, plant Mammoth Iowa Yellow Dent, Pride of Nishna, Reid's Yellow Dent, Legal Tender, Gold Standard Leaming, Diamond Joe's Big White, Iowa Silver Mine, Ratekin's Banner White, Boone County White and Wallace's Favorite. For Pennsylvania, West Virginia, New Jersey and Southern New York plant medium early varieties, like Diamond Joe's Big White, Ratekin's Banner White, Iowa Silver Mine, Pride of Nishna, Gold Standard Leaming and Iowa Gold Mine. For Northern New York and the New England states we recommend our early varieties, such as Queen of Nishna, Gold Standard 90-day corn, Pride of North and our early mammoth flint varieties. Except where corn is grown for ensilage purposes plant Pride of Nishna, Gold Standard Leaming, Reid's Yellow Dent, Diamond Joe's Big White, Ratekin's Banner White or any other standard varieties, such as we grow here in Iowa for general field crop.

Reid's Yellow Dent

THE GREAT NATIONAL YELLOW CORN

Reid's Yellow Dent The standard of perfection in yellow varieties. It is the best known and more widely grown than any other yellow corn. It has made the greatest record and won more prizes at corn shows and exhibitions for uniformity and big yields than any other variety of yellow corn. On good soil, well prepared and properly cultivated it is good for 100 bushels to the acre. The ear is of nice golden color with red cob and medium sized kernels, shelling 60 pounds per seventy pounds in the ear. Maturing in 100 to 110 days in Iowa, Nebraska, Illinois, Indiana or that latitude, and grades No. 2 more often than any other variety. It is also a very rich, nutritious corn for feeding purposes.

PRICES: Postpaid, by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 70c; 7 lbs. (will plant one acre), \$1.00. By freight or express at purchaser's expense: Peck, 75c; $\frac{1}{2}$ bu., \$1.40; 1 bu. to 5 bu., \$2.25; 10 bu. and over, \$2.10 per bu. Bags free on board cars here. If wanted in ear, crated, add 75c per bu. to above prices.

Wallace's Favorite Giant White.

We place this superior variety of corn before our customers for the sixth year with the renewed assurance that experience everywhere has demonstrated that this new variety of big white corn has proven one of the best grown, and is up to the high standard of all our introductions.

In our thirty years' experience in growing seed corn there has been no season but what we have had hundreds of samples sent to us from about everywhere with request that we try them out in our experimental grounds. We wish here to say that we greatly appreciate these favors, although it is utterly impossible to make a fair trial of all of them, but each year we try out many sorts, for it has been our aim from the time we engaged in the growing of seed corn to find, grow and handle only the best varieties, and if there is anything better than we grow we want to find it out.

In Wallace's Favorite we have found a very superior variety and one that has given remarkable results everywhere it has been tried or tested. While we do not claim for it that it will make two, three or four hundred bushels per acre, as is claimed by certain seedsmen for some of their corn, we do know it can be relied upon to yield as many bushels of good, sound, well-matured corn per acre inside of 110 or 120 days as any variety of corn to be found in the world, and if planted on good, strong ground will yield from ninety to 125 bushels per acre, and even more under perfect conditions.

DESCRIPTION: The stalk is large, strong and robust, usually growing from 8 to 10 feet high, with long, broad leaves extending from joints, which are close together and always producing one to three ears to the stalk, running from 8 to 12 inches long, with 16 to 20 rows of deep grains on a pure white cob. This corn has proven a prize winner wherever planted, as it is a tremendous yielder. Just think of a field of corn laden down with an average of two good ears to the stalk. Surely this corn will not disappoint your best expectations, and we want every farmer who plants corn to 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 of grain, for fodder and ensilage purposes in existence, and for a genuine all purpose corn it will surely please you.

PRICE: 1 lb., 25c; 3 lbs., 70c; 7 lbs. (enough to plant an acre), \$1.00, postage or express paid to any point in the United States. By freight or express at purchaser's expense: Peck, \$1.00; $\frac{1}{2}$ bu., \$1.75; 1 bu., \$3.25; 2 bu., \$6.25; 5 bu. and over, \$3.00 per bushel. Bags free, f. o. b. Shenandoah.

Reid's Genuine Yellow Dent.

Ratekin's Iowa Silver Mine White Corn

THE GREATEST RECORD OF ANY WHITE CORN IN THE WORLD.

Ratekin's Genuine Iowa Silver Mine White, Never Fails

FAMOUS CORN; BEST LOVED CORN; MORE WIDELY KNOWN AND PLANTED THAN ANY CORN IN THE WORLD; HAS GREATEST RECORD OF ANY CORN ON EARTH. It's an early maturing corn. It is a corn for the north, south, east and west; it gladdens the farmer's heart at harvest time; makes good where other sorts fail. It brings prosperity to the man who plants it.

We have been growing and improving this variety of white corn for sixteen years—made it our leader prior to introducing Diamond Joe's Big White—have sold and sent out approximately 500,000 bushels of seed to all parts of this country, including every state in the Union; also to many foreign countries—Central Europe, South Africa, Austria, Philippine Islands, New Zealand, Argentina and South America, and everywhere it has given a good account of itself. It is adapted to a wider range of conditions than any variety of corn grown. It has shown the greatest **PRIZE RECORD FOR YIELD** at county, district and state fairs, corn shows and farmers' institutes of any variety in the world. Possibly others have won premiums over it in exhibitions of ears, but this was in the skill and judgment of the exhibitor in the selecting of ears that conformed nearest to the score card upon which points were judged, but such prizes and awards amount to nothing. **IT'S the BIG BUSHELS** the farmer wants for feeding and market purposes.

"Ratekin's Genuine Iowa Silver Mine"

Is noted for its great vitality to withstand and resist extreme conditions of weather, wet or dry; also hot weather, and makes good crops where other sorts wither, burn up and perish under hot winds and scorching sunshine. Each year we have grown this corn we have sought to select and improve it in every way possible, not so much to increase the size of the ears, but to increase uniformity of size and number of ears to the stalk, and have thus eliminated all barren stalks, and brought it up to the highest standard of **PERFECTION**, both in **YIELD** and **EARLY MATURITY**.

There is scarcely a township or neighborhood anywhere that corn is grown but what some of your neighbors can tell you about **"RATEKIN'S 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.

"Ratekin's Iowa Silver Mine" Corn

Is not a new variety, but is one of the oldest and best known sorts, and on account of its great popularity and the wonderful record it has made there are thousands of bushels of mongrel white corn offered and sold every year under the name of Iowa Silver Mine that is no kin to **RATEKIN'S PURE BRED STOCK**, and is incomparable in every quality with **RATEKIN'S** genuine stock that has been kept pure and bred up and improved from year to year.

(See next page for description, page 12.)

Ratekin's Iowa Silver Mine White Corn

THE GREATEST RECORD OF ANY WHITE CORN IN THE WORLD.

"Ratekin's Iowa Silver Mine"

Is as near drouth proof as any in existence, and being of extreme hardiness and vitality, will do better on old, poor or hilly land than any variety known or grown. We offer this corn to the eastern farmer as one of the very best for feeding and for ensilage purposes. In the Southern States, where we have sent thousands of bushels during the past twelve years, it has proven the salvation to the country, and where we were selling only a few bushels here and there a few years ago, we are now selling in carload lots to seed houses and dealers all over the South, including Oklahoma, Arkansas, Texas, Louisiana, Mississippi, Tennessee, Kentucky, Alabama and Georgia, from which points we do a large retail trade in North and South Carolina and Virginia.

DESCRIPTION: Stalk—Medium in height, ranging from seven to ten feet high (dependent upon the land, hill or bottom ground); very leafy broad blades and a lot of them. The type of this corn is very even and uniform; ears run from 9 to 12 inches long, 16 to 20 rows of pure white kernels, solidly set on a medium small cob, ears well filled out at butt and tip ends. The cob being small, it dries out rapidly while the corn is ripening. Thus it is always ready for feeding, husking and marketing earlier than any other of the leading standard varieties by fully two weeks. It is a most wonderful drouth resister, and stands the hot climate and early drouths in the South, where they sometimes are affected with these difficulties, better than any native or other sorts. In addition to this all our Iowa grown seed corn when planted in the South—Oklahoma, Kansas, Missouri, Arkansas, Texas, Louisiana, Mississippi, Tennessee, Kentucky, Alabama, Georgia, Virginia, North and South Carolina—comes to maturity and ripens fully three to four weeks quicker and earlier than any of the native sorts, thus cutting off that much in the most critical period in the making and maturing of a corn crop, besides it comes into feeding and milling uses and purposes that much earlier.

In short, briefly stated, **OUR PURE BRED SEED CORN** can be planted anywhere in the Central Western and Southern States with an absolute assurance of early maturity and an increased yield of from ten to forty bushels more per acre than can be obtained from the ordinary varieties. **RATEKIN'S IOWA SILVER MINE** matures in from ninety to one hundred days here in Iowa.

PRICE RECORD—Everywhere. At one fair ten best ears took first prize, ten smaller ears second prize. Afterwards ten best took sweepstakes over all others, both white and yellow. Total premiums, \$95.00. Captured prize offered in 1896 for largest yield against all other sorts of any kind or color, yielding 215 bushels in Scott County, Iowa. In 1899 the Agricultural Society of Illinois offered three prizes for largest yield on one acre; Iowa Silver Mine was awarded all of them, 196, 176 and 154 bushels per acre. It produced 215 bushels in Iowa, 211 in Indiana, 201 in Arkansas, 196 in Illinois, 145 in Nebraska, 144 in Ohio, 137 bushels per acre in Texas. **IT'S THE CORN FOR EVERYWHERE. IT'S CORN YOU CAN BANK ON.**

PRICE: Postage by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant one acre), \$1.00. By freight or express at purchaser's expense: Peck, 75c; ½ bu., \$1.40; 1 bu. to 4 bu. \$2.25; 5 to 10 bu. and over \$2.10 per bu. Bags free on board cars here. If wanted in ear, crated, add 75c per bu. to above prices.

Ratekin's Genuine Silver Mine.

Boone County, Iowa, March 6.

Ratekin's Seed House:
The twenty-seven bushels of Iowa Silver Mine Seed Corn purchased from you last year was planted all in one field of 160 acres of land, husked and weighed out every bushel at eighty pounds per bushel at husking time and yielded an average of over seventy bushels per acre for entire field. Would have made much more had cutworms not damaged some of it badly. Respectfully,
S. S. McGRATH.

I have just received your catalogue, which reminds me to say I planted my crop to your **IOWA SILVER MINE** White Corn last year, and as a result find that if my entire crop had been planted from it I would have had three times as much corn per acre as I got from our native sorts. In short, I found it everything you claim for it.
JOHN W. WILSON, Wilson County, Tennessee.

Neshoba County, Miss., Aug. 8.
Gentlemen: I wish to thank you and say that your seed corn is all O. K., much better than I was expecting. You make no mistake in recommending corn for the South, as it cannot be equaled. Your corn will make 25 per cent more than our native sorts grown here. Very truly,
M. C. HOWINGTON.

Hinton, Iowa, May 1st.
Ratekin's Seed House:
The Silver Mine Seed Corn you sent to me is so satisfactory that I am encouraged to send you an order for some of your Iowa Gold Mine. Kindly advise me how you are fixed, and if you can make prompt shipment. Very truly,
E. P. HEIZER.

Prophetstown, Ill., March 17th, 1913.
Gentlemen: Inclosed find order for \$16.00 for list of seeds named. I must tell you about the Silver Mine seed corn got from you last year. It done fine for me; grew even better than the sample sent, which I tested before ordering. I am certainly well pleased with all seeds ordered from you. Truly yours,
HENRY E. WILKINSON.

Brooks, Iowa, April 3.
Gentlemen: Enclosed find my check, for which please send me six bushels of Iowa Silver Mine Seed Corn and the following list of garden seeds. I have ordered and received seeds from you before, and I have always been well pleased. That is why I am sending back to you. Truly yours,
F. F. NOLTE.

The seed corn I bought for my Arkansas farms and sent to Clarence Vollmer, Ponset County, last year, gave splendid satisfaction, although we had sixty-three days' drouth, beginning July 8th. Enclosed find draft for \$61.50 for timothy and Alsike clover seed. Ship promptly, same address as before given, Clarence Vollmer, Ponset County, Ark. Truly yours,
E. B. BOYD, Warren County, Ill.

Mr. Boyd is one of our most valued customers. Never complains of price, but always says, "Send the best you have, and send your bill to me," has bought over \$1,000 worth of seeds from us for his farms during the past five years.

Singleton, Texas, Dec. 10th, 1912.
Ratekin's Seed House, Shenandoah, Iowa:

Gentlemen: This is to acknowledge receipt of the sample ears of corn you sent me, and to say I am delighted with them. I have carried them with me in my recent trips over this county, in my demonstration work, and am quite sure that many of the farmers of this county will try out different varieties that you sent me the coming season. Kindly mail your 1913 catalog to the following address, as soon as ready for mailing. Yours very truly,
W. H. ALLEN, U. S. Demonstration Agent.

Madison County, Ill., Jan. 20.
Please send me a copy of your catalogue. In regard to Ratekin's Iowa Silver Mine, also Diamond Joe's Big White, I got from you several years ago will say if I had known about them long before I did I would have raised **HUNDREDS OF BUSHELS MORE ON THE SAME AMOUNT OF LAND** than I did from ordinary varieties with same amount of labor. Yours truly,
WM. HERRMAN, Bethalto, Ill.

Chickamauga, Georgia, Jan. 10, 1913.
Gentlemen: The white seed corn I ordered and received from you last spring has proven to be the stuff for this country. I did not get to plant it until late, but have had roasting ears since the 1st of June. We have had very dry weather with but little rain, and I have found it to be one of the very best drouth resisters I have ever seen. Very truly yours,
I. T. HASTINGS.

Ratekin's Big Banner White

(Ratekin's Big Banner White.)

Here is another new introduction, introduced three years ago. Since then splendid reports have come to us from everywhere, and we have not the least hesitation in recommending this corn to our customers everywhere.

This corn is a cross between two of the best known varieties grown, Ratekin's Iowa Silver Mine and Boone County White, which we have been hybridizing and breeding to a distinct character for seven years; thus establishing a variety of strong character, uniformity in size, color and shape, which we aimed to accomplish before offering it as a new introduction. At the beginning, we started out knowing these varieties could be blended together in a way that would be an improvement over either of them, and we have perfected in this new corn a variety that we believe will become more famous than either of its parents.

As every farmer knows who has tried it, the Iowa Silver Mine has proven of greater tenacity, life and vigor to resist unfavorable conditions, extreme drouth, hot weather, etc., than any other variety in existence—that it is a variety that does better on poor, thin or old land, and yet on good rich land it has shown larger yields than any variety in the world, has also taken more premiums and prizes at county, state and national corn shows than any other variety in existence.

Boone County White, with which the cross was made, is a somewhat larger eared and larger stalk than Iowa Silver Mine; also somewhat later, requiring ten to twenty days longer to mature, but in this cross we have combined together one of the best varieties of corn ever produced. This prediction has been so thoroughly verified from our experience and reports from those who tried this corn out that we feel justified in giving our unqualified recommendation of it to the farmers, and want every corn grower who plants corn to try it the coming season.

DESCRIPTION: Ratekin's Big Banner White is a pure bred white variety; every stalk producing from one to two good, well developed ears, running from eight to twelve inches in length and from seven to 8½ inches in circumference, containing from sixteen to twenty rows deep grains solidly set on a medium size cob; stalks grow from seven to twelve feet in height, dependent on ground planted on; broad blades and a lot of them, making it an excellent variety for fodder or ensilage purposes; matures in 100 to 110 days from planting, and yields on good corn land under ordinary tillage from sixty to 100 bushels per acre, good, sound, solid, well matured corn.

PRICES: Sample ear, postpaid, 25c; 1 lb., postpaid, 25c; 3 lbs., 70c; 7 lbs. (enough to plant one acre), \$1.00. By freight or express at expense of purchaser: Peck, 75c; ½ bu., \$1.40; 1 bu., \$2.50; 2 bu., \$4.75; 5 bu. and upward, \$2.25 per bu. Bags included, f. o. b. Shenandoah. If wanted in ear or box, add 75c per bushel to foregoing prices.

Gentlemen: You may be interested to know my experience and results from **RATEKIN'S BIG BANNER WHITE** Seed Corn, obtained from you last spring. I have just finished husking my corn crop and find this corn gave me an average yield of **NINETY-SEVEN BUSHELS PER ACRE** and over thirty bushels better yield than any other variety grown on my farm; all under same exact conditions. Shall remember you again when in want of any seeds. Very truly yours,

FRED J. SCHICK.

Dubuque County, Iowa, Dec. 10th, 1912.

Gentlemen: I have just finished harvesting my corn crop and have been waiting until it was all gathered, in order to make intelligent report. I planted May 13th and 14th and my crop from your Big Banner White was sufficiently matured by September 15th to be out of the way of frost, and my entire crop, thirty-two acres of it, gave me a yield of seventy-six bushels per acre, weighed out of the field at seventy-five pounds per bushel. It has surely proven all you claim for the best in both yield and quality of any variety I have ever grown and I have been a corn grower for over thirty years. Very truly yours,

SAMUEL J. KURTZ.

Storey County, Iowa, Nov. 20th, 1912.

McLean County, Ill., Dec. 1st, 1912.

Gentlemen: In regard to the seed corn obtained from you last spring, **RATEKIN'S BIG BANNER WHITE**, would say I have found in it just what I have been looking for for the past ten years. I planted forty acres from the six bushels of seed obtained from you May 15th, 16th, 17th and 18th, and from this forty acres I have harvested 2880 bushels of the soundest, best corn I ever put into my cribs. This was an average of seventy-two bushels per acre. My crop was harrowed once when coming through the ground and afterward plowed three times—had no extra cultivation. Allow me to again thank you for the high qualities of seed sent me; also for your prompt action in shipment. Yours very truly,

HERMAN SCHMIT.

Ratekin's Mammoth Iowa Yellow Dent

Sixty Days After Planting.

seventy-four bushels per acre for every acre planted.
Co., Miss.

THOS. SQUIRES, Washington

**FAMOUS FOR ITS UNIFORM LARGE EARS, HIGH YIELDING QUALITIES;
ALSO ITS EARLY MATURITY.**

ITS HISTORY: For years we have been experimenting, crossing, hybridizing and breeding from many varieties and strains of yellow corn. In order to obtain a **LARGE-EARED EARLY MATURING YELLOW CORN**, something that would match up with our Diamond Joe's Big White, which we originated and introduced in 1906. Ever since the introduction of that corn we have had a stream of inquiries and a demand for a yellow corn of similar characteristics that equaled it. During all this time we were busy trying out various combinations and varieties, and found some a failure, some fair and some reasonably good, but in **RATEKIN'S MAMMOTH YELLOW DENT**, the name we gave this variety, we found an exceptionally ideal variety, just such as we were aiming at. We have, however, always been cautious about giving endorsement or recommending any new variety until thoroughly tried out and until we were sure it would prove all we claimed for it. Prior to cataloguing this corn for the first time, two years ago, we sent out trial packages, gratuitously, to many hundreds of our customers all over the country, and every report was not only flattering, but was exuberant in extolling the high yielding and early maturing qualities of this new variety. Therefore we catalogued this corn in 1912 for the first time, but having only a limited supply of it, it was all taken so quickly we hardly knew we had any. This past season we planted liberally of it, and hope to be abundantly able to supply the demand this year. At this time, December 1st, we have reports from fully 50 per cent of our customers who planted it the past season, and all report the most satisfactory results, and **WE ARE PLEASED TO ENDORSE IT** as being one of **THE BEST ALL AROUND VARIETIES OF YELLOW DENT CORN** for general field crop, market, feeding and ensilage purposes every offered or introduced to the American farmer.

DESCRIPTION: In Ratekin's Mammoth Iowa Yellow Dent our friends and customers will find a high-bred, pure variety of beautiful golden yellow corn, and one that will please you. Contains sixteen to twenty rows on the cob, deep and solidly set; makes the finest appearance when shelled, but equally beautiful in the ear. It grows a strong, rank, rugged stalk of medium height, very profuse blades; the ears are set midway of

Listen to the People and You Will Not Go Wrong.

"The people voice the sentiment. They know whether a thing is right or wrong, good, bad or indifferent. They praise it if good and condemn it if bad. The opinion of the people is worth a hundred times more than the opinion of the man who owns the proposition that is being talked about."

Plymouth Co., Iowa.
Gentlemen: Replying to your letter of recent date am pleased to say my crop grown from your Mammoth Iowa Yellow Dent Corn I sent to you for has proven a great success here this year, making an average yield of sixty-eight bushels per acre, and at least ten bushels better than any other variety I planted this year. Very truly yours,

J. W. MILLER.

Mammoth Iowa Yellow Dent has proven a great success here last year. I planted April 10th; land in fine condition; got an excellent stand, and the best yield ever grown in this locality, making

(See next Page)

Ratekin's Mammoth Iowa Yellow Dent.

Ratekin's Mammoth Iowa Yellow Dent

the stalk, $3\frac{1}{2}$ to 4 feet from ground, thin husk and small shank or neck at butt of ears; making it easy to husk or snap; ears run from 8 to 12 inches long and from $7\frac{1}{2}$ to $8\frac{1}{2}$ inches in circumference; every stalk bears one to two good ears, there being no barren stalks whatever in seasons of ordinary moisture or normal conditions, and withal a wonderful drought resister.

EARLY MATURITY: In breeding this new variety of corn we have kept uppermost in mind a **LARGE-EARED, EARLY MATURING VARIETY** that would make itself in ninety to 110 days, producing the maximum yield.

PRICES: Sample ear, postpaid, 25c; 1 lb., postpaid, 25c; 3 lbs., 70c; 7 lbs. (enough to plant one acre), \$1.00; pk., 75c; half bu., \$1.40; 1 bu., \$2.50; 2 bu., \$4.50; 5 bu. and upward, \$2.25 per bu. Bags included, f. o. b. Shenandoah. If wanted in ear or box, add 75c per bushel to foregoing prices.

NOTE: It has been pointed out by the Department of Agriculture of various state experimental stations and demonstrated beyond question by suitable crosses of varieties and strains of corn, when thoroughly hybridized, and after having formed a well-developed character, it has been shown to be of greater productive power, giving materially larger and better yields than either of its parents. This point has also been brought to attention through farm bulletins issued by the Department of Agriculture at Washington, and already this method of improving the yield of corn has been taken up by a goodly number of advanced, progressive corn growers. This method, however, requires time, patience and a good degree of intelligence and a good judge of corn to go through all the munitions, combined to bring out the best results. We have given seven years' hard study and close attention to every detail in crossing and hybridizing this variety of corn. Yet, while experimenting on this, we have been trying many other crosses, and this introduction is the **SUPREME SUCCESS AND RESULT** of all.

Jeffersontown, Ky., Jan. 11th, 1913.

Ratekin's Seed House: Please send me a copy of your 1913 catalogue by return mail. Since I ordered seeds from you last year I have moved back to "old Kentucky," and it sure seems more like home to me. The seed corn I got from you last year gave splendid results, and I was greatly pleased with it. I shall want a lot of seeds this year, both for the farm and garden, and will appreciate your catalogue at earliest convenience. Very respectfully,

MRS. SARAH MESSEX.

Kossuth County, Iowa.

Gentlemen: I am well pleased with your Mammoth Iowa Yellow Dent, both in yield and early maturity, and can fully recommend it as being well adapted to this latitude and locality. My crop from it made an average yield of sixty-four bushels per acre, and was out of the way of frost by September 15th. Very truly,

S. E. BLOEMKER.

Your Mammoth Iowa Yellow Dent is surely the corn for this country. It made better for me the past season two to one than any other variety grown in this locality. Besides it is a month earlier than any of our home-grown sorts.

B. F. HUDSON, McLennan County, Texas.

Sangamon County, Ill.

Gentlemen: I have been well pleased with all the seed I have purchased from you for the past three years, and was especially pleased with the Big Mammoth Yellow Dent I got from you last spring. I have found this to be the best variety of yellow corn I have ever grown. Best in yield and the earliest to mature. You can safely recommend it to the farmers of Illinois, and it will not disappoint their best expectations. Respectfully,

F. W. COLLINS.

St. Joseph County, Ind.

Gentlemen: I purchased seed corn from you in 1910 and 1911, and again last spring, and have always been well pleased with quality of seed and crops grown from it, but I want to especially mention the Big Mammoth Yellow Dent got from you last spring. I have grown the finest crop from this that I have ever grown in my twenty years' experience as a corn grower. It is sure the corn for this country, giving enormous yield, even size large ears, and every stalk producing one and two ears. Wishing you every success, I remain, yours very truly,

W. S. STAPLETON.

Marion County, Ind.

Gentlemen: Last spring I sent to you for two bushels of your Mammoth Yellow Dent Seed Corn, and must tell you about it. I planted May 10th. It came up quickly and grew off rapidly from the start. I gave it no extra cultivation. It matured ten days ahead of any of our ordinary varieties, and made a yield of twenty bushels more per acre than any of them. It has proven a great success. I am well pleased and will plant no other variety the coming season. With best wishes I am, yours truly,

J. W. WOOLSEY.

Warrick County, Ind., Nov. 25th.

Gentlemen: Your Mammoth Yellow Dent did well for me and made twenty bushels better yield per acre than any of our best native varieties. It is sure all you claim for it, "The Best Yellow Dent Corn Grown." Large ears and early to mature. Long may you live and prosper. Sincerely yours,

M. C. CHRISTIAN.

Breckinridge County, Ky., Nov. 20th.

Gentlemen: Your Mammoth Yellow Dent came through with flying colors. I have found it the best yellow corn I ever before tried. In short, it is good enough for me, and I will plant no other the coming season. My entire crop made an average yield of over ninety bushels per acre, and was fully fifteen days earlier to mature than any of our ordinary sorts. Send me your catalogue as soon as ready for mailing. Yours truly,

FRED LOENHARDT.

Spartanburg, Pa.

Gentlemen: We have received the seeds ordered from you in good condition, and wish to thank you for your prompt attention in tracing and rushing them through. Very truly yours,

AUSTIN ROGERS.

Your Mammoth Iowa Yellow Dent proved a great success for me this year.

JOHN W. BURROUGHS, Christian County, Ky.

RATEKIN'S MAMMOTH IOWA YELLOW DENT beats them all. Just the corn I have been looking for. Will plant my entire crop to it the coming season.

SAMUEL CHEATAM, Logan County, Ky.

Am well pleased with your Mammoth Iowa Yellow Dent. Grew the best and biggest corn crop from it this year I have ever grown; seventy-two bushels per acre and a month earlier than other sorts.

A. C. MCKINNEY, Boyd County, Ky.

Ratekin's Mammoth Iowa Yellow Dent is the greatest yielder I have ever planted. It's the corn for this country. Will plant no other the coming season.

SAMUEL RUMBAUGH, Fayette County, Ky.

Your Mammoth Yellow Dent is all right. Largest yield and earliest to mature. There is none like it.

L. L. HOWARD, Henderson County, Ky.

Your Mammoth Yellow Dent is the corn for me. You will never improve on it. It is large, even and uniform, and very early to mature, and the best yielder I have ever tried.

JOE NORTH, Montgomery County, Tenn.

Mammoth Iowa Yellow Dent received and planted April 25th on strong bottom land; had ordinary cultivation; made a yield of eighty-six bushels per acre and came to maturity two weeks ahead of any of our earliest sorts.

SAMUEL PATERSON, Davidson County, Tenn.

Mammoth Iowa Yellow Dent takes the cake. Received and planted April 17th and 18th; good land and good cultivation; matured early and made a yield of seventy-six bushels per acre of finest corn grown in this country.

FRED TYLER, Shelby County, Tenn.

I have always had good success from corn seed got from you, but among all the best was your Mammoth Iowa Yellow Dent the past season, when I got a yield of seventy-three bushels per acre from my entire crop. It's early, large and fine for this country. Will plant no other the coming season.

J. C. PERRY, Le Flore County, Miss.

I grew a bumper crop from your Mammoth Iowa Yellow Dent the past season and can fully recommend it for this country. It is much larger in stalk and ear, and matures a month ahead of any of our native sorts, and yields two to one more and better corn per acre.

SAMUEL PARKER, Hunt County, Texas.

Your Mammoth Iowa Yellow Dent came through with sailing colors, and has proven the best corn ever introduced into this part of the country. Send your 1913 catalogue as soon as ready.

L. W. COOPER, Robinson County, Texas.

Dubuque County, Iowa, Dec. 5th, 1912.

Gentlemen: I was well pleased with the seed corn, Ratekin's Iowa Yellow Dent, received from you last spring, and have found it everything you recommended it to be. It is a large eared, early maturing corn, one of the best yielding varieties I have ever grown. Truly yours,

L. M. EVERETT.

Madison, Mo., May 20, 1913.

Gentlemen: This is to thank you for promptness in refunding for seeds that you omitted to send me through some mistake. I surely like to do business with that kind of a house, and shall always be pleased to recommend you.

EDMUND RUTTEN.

Ratekin's Pride of Nishna

Grand, Glorious Corn

THE ABOVE ILLUSTRATES THE HIGHEST TYPE OF THIS FAMOUS CORN.

"THE PURE QUILL"

Pride of Nishna

This grand, glorious variety of Yellow Dent Corn was the first variety originated by my father forty-six years ago, when he first settled in southwestern Iowa on a farm, long before we engaged in the seed business, and was the first yellow corn introduced by us thirty years ago, when we began the seed business. At that time, in making selection of ears for photographic illustration, we did not have in mind present-day ideas of some of the so-called seed corn specialists, but simply went to our corn and selected out ears, just common ears of medium size that fairly represented variations, type and character. Every one knows that about all human beings look somewhat alike, but seldom are there any two that look so nearly alike but what you can distinguish one from the other. The same rule applies to ears of corn, and out of the thousands of bushels we have grown and handled we do not remember to have found two ears of corn when laid side by side but what we could find a difference somewhere. In making selection, however, for the above illustration of ears we have tried to match them up as nearly as we could, but when you look upon a beautiful illustration like the above don't be carried away with the idea that every ear of corn you get or that you grow from it is going to be just like the picture you see, but from a field of this corn you can select plenty of ears just as good, and as near perfect as they represent, and by saving and planting them in an isolated plot for seed and watching them closely, keeping a record of the performances of each ear with results, and cutting out all barren, weak and sickly stalks before they begin to shed and scatter their pollen, saving the best and most perfect ears for seed, you will then have begun to improve your yields the same as we did forty-six years ago, when we began the improvement of corn.

During the past thirty years we have sold and sent out no less than a million bushels of this variety for seed—over seventy thousand bushels, wholesale and retail in 1913, making shipments to forty-two of the forty-eight states 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 great success and a tremendous yielder and top-notch, always maturing in 100 days in the North and ninety days in the South.

We fully recommend this variety for any county in the states of 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 further north than those mentioned.

While this corn, owing to its great vigor and vitality, does well on poor, thin, sandy soil or old land, it, like other varieties, does best on strong, rich corn land. It is here that it attains its highest perfection and produces the heaviest yields, often making ninety to 100 bushels per acre.

If you are a feeder you will find no corn that contains more nutritious fattening qualities than "Pride of Nishna." If you market your crop you will not find any variety that will market more bushels of good, sound, solid, well-matured corn per acre. No corn grower will make any mistake if he plants his entire crop to "Ratekin's Pride of Nishna." We know whereof we speak when we give you this advice.

DESCRIPTION: The stalks grow from 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 of corn, thus proving its solidity. It is a golden yellow, and a big crib full of it is a beautiful sight to behold. Its potency or power to reproduce is so great that neither dry or wet weather influences its growth and maturity, as they do many other sorts. By long and continued selection the barren, weak and sickly 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 days' good corn weather. Our word for it, it will please you in every respect.

PRICE: Postpaid, by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant one acre), \$1.00; by freight or express at purchaser's expense, pk., 75c; ½ bu., \$1.40; 1 bu. to 4 bu., \$2.25; 10 bu. or over, \$2.10 per bushel. Bags free, f. o. b. Shenandoah. If wanted in ear, crated, add 75c per bushel to above prices. (Five bushel lots and over at ten bushel prices).

Ratekin's Pride of Nishna

WHAT THE PEOPLE SAY

Photo of "Ratekin's Pride of Nishna."
Sixty-five bushels per acre. Grown in Hunt County, Texas in the drouthiest season in fifty years. No other corn made above ten bushels per acre.

Hunt County, Texas.

Ratekin's Seed House:

Gentlemen: I have not received your Seed Catalogue this year. Please send one by return mail.

With regard to the seed corn, "PRIDE OF NISHNA," I got from you last spring, would say I perhaps grew the best crop in Hunt, Fannin, Collins or Grayson Counties, the best corn counties in Texas. We have had a series of dry seasons in Texas for three years, culminating in a general burn-out last year. Conditions for the preparation of ground were never better, because we had no rain. I plowed my ground early and continued to work it thoroughly until March 1st—meantime sent to you for my seed. It came finer than silk, arriving March 1st, and I planted next day. As a result we had practically no rain during the corn growing season. BUT I GOT SIXTY-FIVE BUSHELS PER ACRE FROM MY ENTIRE CROP OF TWENTY ACRES. Am inclosing photograph of a few ears. It all averaged up with this. Sure it is drouth-proof.

I want some Diamond Joe this year. Send catalogue at once. Truly yours,
JOHN A. ARNOLD.

Pride of Nishna, planted May 19th, matured soundly September 1st. Best and largest yield I ever raised.
E. C. BEEBE, McHenry County, Ill.

Pride of Nishna I got from you is fine. Best crop I ever raised. Made average yield of seventy-two bushels per acre.
J. R. SHEARON, Union County, S. D.

Pride of Nishna and Iowa Silver Mine are the finest corn in this country. Estimated yield by everybody ninety to 100 bushels per acre.

MRS. L. E. WEBSTER, Tama County, Iowa.

Pride of Nishna and Silver Mine ordered from you last spring done fine and matured soundly before frost. Pride of Nishna made yield of seventy-five bushels per acre, and think Silver Mine equally as good.

O. J. LUND, Rock County, Wis.

Seed corn got from you proved all right, first-class. Planted May 19th; cultivated shallow four times; made splendid crop; well matured.

WM. SAXE, Sauk County, Wis.

Found the ten bushels of seed corn, Pride of Nishna and Silver Mine, got from you last spring first-class. Best crop I ever had. Made around 10⁰ bushels per acre, sound and well matured.

C. H. ARMAN, Lancaster County, Neb.

Pride of Nishna planted May 25th. Character and quality fine. Matured ready for cribbing October 10th. Yield seventy-two bushels per acre.

M. F. OLDFIELD, Du Page County, Ill.

Pride of Nishna got from you made me seventy-four bushels per acre—twenty bushels better than any of my other sorts.

S. L. BOYD, Lucas County, Iowa.

Pride of Nishna corn got from you made fine stand. Soundest, solidest corn I have. Made an average yield of seventy-four bushels per acre.

A. MANSFIELD, Harrison County, Iowa.

Have received catalogue and talked with my neighbor, Mr. Huggins, who planted your Pride of Nishna last year. He was well pleased. Inclosed find check for ten bushels seed corn.

P. M. GRUBB, Ellsworth County, Kan.

Seed corn purchased from you proved highly satisfactory, and am under many obligations for promptness in filling my order. Have a fine stand. Will want more seed another year.

D. DOOL, Republic County, Kan.

Had splendid luck and good stand of corn from the fifty bushels of Pride of Nishna I got from you. Want about a thousand pounds of rape seed, and prefer buying from you. Make me prices.

P. JANSEN & SON, Jansen, Neb.

I have been planting your Pride of Nishna for several years, and always found it O. K. Also other seeds ordered of you.

WM. FENTON, Washington County, Kan.

Lake View, Ark.

I have planted and grown Ratekin Seed Corn for the past five years, and am very much pleased with it. Send price list and catalogue as soon as out. Truly yours,

C. E. TONEY,

Planter and Plantation Supplies.

TABLE SHOWING QUANTITIES OF SEED USUALLY SOWN PER ACRE

	Weight per bushel	Quantity to sow 1 acre		Weight per bushel	Quantity to sow 1 acre
Alfalfa	60 lbs.	18 to 20 lbs.	Millet, German	50 lbs.	1 to 1½ bu.
Barley, broadcast	48 lbs.	2 to 3 bu.	Millet, Hog	50 lbs.	1 to 1½ bu.
Bean, Dwarf, in drills	60 lbs.	1½ bu.	Millet, Hungarian	48 lbs.	1 to 1½ bu.
Bean, Pole, in hills	60 lbs.	16 to 12 qts.	Oats	32 lbs.	3 to 4 bu.
Beet, Table, in drills		6 lbs.	Onion Seed, in drills	6 lbs.	3 to 5 lbs.
Beet, Mangel Wurzel		6 lbs.	Onion Sets, in drills	32 lbs.	6 to 12 bu.
Broom Corn, in hills	46 lbs.	8 to 10 qts.	Onion Seed, for sets, in drills ..		50 lbs.
Buckwheat	48 lbs.	1 bu.	Parsnips, in drills		4 to 6 lbs.
Cabbage, in beds, to transplant		¾ lb.	Peas, field or stock, broadcast ..	60 lbs.	1½ to 3 bu.
Carrots, in drills		3 to 4 lbs.	Pea, Garden, Wrinkled, in drills	56 lbs.	1½ bu.
Corn, in hills (for grain)	56 lbs.	4 to 6 qts.	Pea, Round, in drills	60 lbs.	1½ bu.
Corn, in hills (for fodder) ..	56 lbs.	8 to 10 qts.	Potatoes	60 lbs.	8 bu.
Clover, Alsike	60 lbs.	4 to 6 lbs.	Potato, cut Tubers	60 lbs.	8 bu.
Clover, Red	60 lbs.	8 to 10 lbs.	Pumpkins, in hills		3 lbs.
Clover, White	60 lbs.	2 to 4 lbs.	Radish, in drills		8 to 10 lbs.
Cucumber, in hills		4 to 6 lbs.	Rape, Dwarf Essex		5 to 8 lbs.
Flax, broadcast	56 lbs.	1½ bu.	Rye	56 lbs.	1½ to 2 bu.
Grass, Kentucky Blue	14 lbs.	3 bu.	Salsify, in drills		8 to 10 lb-
Grass, Orchard	14 lbs.	3 bu.	Sorghum, or Sugar Cane	50 lbs.	2 bu.
Grass, English Rye	22 lbs.	3 bu.	Spinach, in drills		15 lbs.
Grass, Red Top	14 lbs.	3 bu.	Squash, Bush Varieties, in hills		4 lbs.
Grass, Timothy	45 lbs.	8 to 10 lbs.	Squash, Running Varieties, in hills		3 lbs.
Grass, Lawn	14 lbs.	4 bu.	Tomato, to transplant		¼ lb.
Kafir Corn, in drills	50 lbs.	10 lbs.	Turnip, broadcast		2 to 3 lbs.
Kafir Corn, broadcast	50 lbs.	1 bu.	Turnip, in drills, 1 oz. to 250 ft. of drill		1½ lbs.
Melon, Musk, in hills	lbs.	2 to 3 lbs.	Vetch		30 to 40 lbs.
Melon, Water, in hills	lbs.	4 to 5 lbs.	Wheat	60 lbs.	1½ to 2 bu.

Saint Charles White

Saint Charles White.

Saint Charles White

This variety of white corn was originated in St. Charles County, Missouri, and is very popular with a large number of our customers in Missouri, and makes well in Southern Iowa. In fact, our Missouri customers with whom this is such a favorite claim to get much better results from our Iowa grown seed than from their Missouri grown, and that it matures from ten to fifteen days earlier than home grown sorts of the same variety.

DESCRIPTION: The St. Charles White is a very handsome pure variety of white corn set on a red cob, and appears to make a finer and better grade for milling purposes for corn meal than almost any other sort. The ears are usually eight to ten inches long, sixteen to eighteen rows of deep kernels, the upper corners being rounding. The stalk grows from eight to ten feet high, dependent upon the land upon which it is planted, the lowlands and bottom producing the taller stalks; the stalk growing broad succulent blades, thus making it a very desirable corn for general crop purposes; for grain, fodder or for ensilage. Our customers in the South, North, East and West are greatly in favor of this excellent variety of corn: In the South for the grain crop it produces and in the East, West and North for the fodder and ensilage it produces.

PRICE: Postage by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 70c; 7 lbs. (will plant one acre), \$1.00; freight or express at purchaser's expense: Peck, 75c; $\frac{1}{2}$ bu., \$1.40; 1 bu. to 5 bu. and over, \$2.25 per bu. Bags free on board cars here. If wanted in ear, crated, add 75c per bushel to above prices.

Boone County White

Boone County White

Sometimes listed under the name of Boone County Special, is a highly bred variety of white corn of extra large size, containing a high percentage of oil. It is late maturing, but with long seasons and favorable conditions, it is a splendid yielder. In many places it is a great favorite. The ears run from 8 to 12 inches long, $7\frac{1}{2}$ to $8\frac{1}{2}$ inches in circumference, containing eighteen to twenty-four rows, weighing from twelve to eighteen ounces. The cob is medium large and white in color. The ears are quite uniform in size and appearance. The kernels are pearl white, quite rough, fine large germ. This variety grows a large stalk from ten to twelve feet high with an abundance of foliage, and like all other white varieties, is the best for old, thin or poor soil. They gather more plant food from the air and less from the soil than does yellow corn. With favorable seasons in localities where it has plenty of time to mature, it is particularly valuable; say the southern half of Indiana, Illinois and Missouri. Matures in about 120 days. Our seed stock of this was grown from pure, inherited stock and can be relied upon to give the best possible results that can be obtained from this variety.

PRICE: By mail, post paid, sample ear 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.00. By freight or express, at purchaser's expense: Peck, 75c; $\frac{1}{2}$ bu., \$1.40; 1 to 5 bu. and over, \$2.25 per bu. Bags free f. o. b. here. If wanted in the ear, crated, add 75c per bu. to above prices.

Improved Calico Corn

This corn in 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 nine to twelve inches in length and measure seven to eight 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 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: By mail, postpaid, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant one acre), \$1.00. By freight or express: Peck, \$75c; $\frac{1}{2}$ bu., \$1.40; 1 bu. to 5 bu., \$2.25 per bu.; over 5 bu., \$2.10 per bu. Bags free, on board cars here. If wanted in the ear, crated, add 75c per bushel to above prices.

Legal Tender

This is one of the most prominent of large medium late varieties. It is a very productive corn where seasons will permit of it maturing, and it's no uncommon thing to find ears 12 inches long that weigh from 1 to 1½ pounds each. The stalks grow ten to twelve feet high, with very heavy foliage, which makes it valuable fodder and ensilage. Legal Tender has been a great premium taker, and to those who want a large late variety of corn we believe you will find it a splendid variety and that it will become a permanent fixture on your farm. Under favorable conditions this variety will mature in 115 to 120 days, and seems to be well adapted to the southern states. Our seed stock of this variety is pure bred of inherited stock, and you can depend upon it giving you the best possible results.

PRICE: By mail, postpaid, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.00. By freight or express at purchaser's expense: Pk., 70c; ½ bu., \$1.40; 1 to 5 bu., \$2.20 per bu. Bags free, f. o. b. here. If wanted in the ear, crated, add 75c per bu.

Johnson County White

This is the corn which has won so many prizes

at the National Corn Expositions during the years 1907, 1908, 1909, 1910, 1911 and 1912. The ear shown in the illustration sold at auction for \$250, after winning the \$1,000 prize at a Corn Show. This variety will not do for the northern states, but is suitable only for those localities in which they have 120 to 140 days to mature. The ears are cylindrical to within about two inches of the tip, from which point they taper slightly. The kernels and also the cob are white. The tips and butts are well filled and the ears which are packed with uniform, wedge-shaped kernels, averaging about ten inches in length. The stalks are strong and thrifty, averaging 9 to 10 feet high. This variety will yield under favorable conditions 100 to 125 bushels per acre. (Space does not admit of illustration.)

PRICES: Sample ear, postpaid, 25c; 1 lb., postpaid, 25c; 3 lbs., 70c; 7 lbs. (enough to plant one acre), \$1.00; pk., 65c; half bu., \$1.40; 1 to 5 bu. and upward, \$2.25 per bu. Bags included, f. o. b. Shenandoah. If wanted in ear or box, add 75c per bushel to foregoing prices.

Iowa Gold Mine

The Iowa Gold Mine is the Earliest to Mature; the Purest Yellow; the Deepest Grain; the Best Medium Early; known than any other variety grown, and has made the State of Iowa famous as the mother of this wonderful early variety of yellow corn. It is planted in every state in the Union and in Central Europe, South America, South Africa, Austria; everywhere that corn is planted or grown.

DESCRIPTION: It is a medium early, between the leading best standard field varieties, such as we grow for 100 bushel crops in the central corn belt of the northwest, and the extra early sort that matures in eighty to ninety days in the extreme northern corn growing boundaries, and also for late planting and replanting, where other sorts have failed from one cause or another. **GOLD MINE IS A FAVORITE** in its class with every farmer who has ever planted it, ripening a few days later than Pride of North, making itself in about ninety days. Ears are not large, but medium in size, and very symmetrical; color a bright golden yellow, as yellow as gold itself; grain is deep, cob small, and therefore dries out early and quickly. Seventy pounds in the ear will shell out sixty-two to sixty-three pounds of shelled corn, leaving but seven to eight pounds for the cob. It is free from barren stalks; every stalk bears from one to two good ears, running from eight to ten inches long, thus is a very heavy yielder for a medium between extra early and late varieties. The above are honest, fair descriptions, and I am sure this corn will not disappoint your best expectations.

PRICE FOR IOWA GOLD MINE: One ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (enough to plant one acre), \$1.00, postpaid or express prepaid to any point in the United States. By freight or express, at purchaser's expense: Pk., 75c; ½ bu., \$1.40; 1 to 5 bu. or more, \$2.25. Bags free, f. o. b. here.

Ratekin's Imperial White

Ratekin's Imperial White is a variety regarded with great favor and admiration the country over, especially in the South, where it is grown extensively for main crop, and in the Eastern and New England States, where grown for ensilage and fodder purposes. It is without doubt one of the best varieties for a combination crop for grain fodder and ensilage purposes there is grown or in existence.

We originally obtained the seed of this variety from an old German farmer, who was one of the most successful corn growers in central western Illinois, and we first introduced it thirteen years ago, since which time we have grown and sent out thousands of bushels for seed, and everywhere it has proven a great favorite and success.

DESCRIPTION: It is pure white, with red cob—a sign within itself of great vitality; ears run from nine to twelve inches long, measuring from seven to eight inches in circumference; sixteen to twenty-four rows of deep grains firmly set on a small red cob, as shown by the accompanying illustration, producing two to three good ears to the stalk. The stalks are short and heavy, averaging from seven to ten 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 ninety 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: Postage by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 60c; 7 lbs. (will plant an acre), \$1.00. By freight or express at purchaser's expense: Peck, 75c; $\frac{1}{2}$ bu., \$1.40; 1 bu. and over, \$2.25 per bu. If wanted in the ear, crated, add 75c per bushel to above prices. (Five bushel lots at ten bushel prices.)

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 it is not as early to mature as our Imperial White, Diamond Joe's Big White and Iowa Silver Mine.

PRICE: Postpaid by mail, 1 lb., 25c; 3 lbs., 60c; 7 lbs., \$1.00. By freight or express, at purchaser's expense: Peck, 75c; $\frac{1}{2}$ bu., \$1.25; 1 bu., \$2.50; 5 bu. and over, \$2.40 per bu. Bags included, f. o. b. cars here.

Boys, Look Here—Money in Pop Corn.

Pop Corn should be found in every garden and on every farm, especially if there are children in the home to enjoy it during the long winter evenings. The constant demand for pop corn makes it a profitable crop. Let the boys raise an acre of it for their own spending money. Be sure to procure good, pure seed for them, as pop corn mixes readily with field varieties.

WHITE RICE, cultivated and used more than any other sort. Short ears, with four to six stalks, with long, pointed kernels. Very productive.

QUEEN'S GOLDEN, the largest sort. Stalks grow five to six feet high, producing two or three large ears each. Pops perfectly white. Single kernels expand to one inch across.

Very often there is good money in "little things" which, because they are small, people are apt to overlook. Pop corn is one of these.

The yield of ear corn to the acre is equal to any of the larger varieties, as it can be planted much closer than larger varieties of corn.

Boys or girls can grow an acre or two of pop corn and dispose of the product to their neighbors or to the nearest merchant. Why not turn it over to the children? It will afford them pleasure and profit.

Plant at the rate of six to eight quarts to the acre. We have a choice lot of this pop corn carefully chosen for seed purposes.

PRICES: Pkt., 5c; lb., 20c, postpaid. By express or freight at purchaser's expense: Lb., 10c; 20 lbs., \$1.50; 100 lbs., \$6.00. Also Queen Golden and other varieties, same price.

WE ARE SEED CORN GROWERS AND NOT SEED CORN DEALERS! BUY YOUR SEED DIRECT FROM THE GROWER.

Gold Standard Leaming

The King of Cattle Corn This corn was originated by Mr. J. S. Leaming in Ohio in 1826, and was first introduced into this part of Iowa forty years ago, by pioneer settlers who came here from Ohio. Even at that early date, long before scientific corn breeding was much talked of, it was noted for its uniformity and purity, also its distinct characteristics, and is extensively grown by stock feeders everywhere. Since its first introduction many strains and varieties 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. However, by careful selection year after year, we have greatly improved this excellent variety until it cannot be excelled.

RATEKIN'S IMPROVED GOLD STANDARD LEAMING is known as the **KING OF CATTLE FEEDERS' CORN**. Not only this, but a great corn for horses, hogs and sheep. There is none better. Being rich in protein and oil, it is the ideal from a feeder's standpoint. The cob is more easily crushed and masticated by cattle than most other varieties. In addition to its large grain yields it is grown very extensively in the East, New England, New York, Pennsylvania and Northern Ohio and Indiana also in Michigan, Wisconsin, Minnesota and the Dakotas, for ensilage and fodder purposes of which it makes and gives a wonderful supply of blades and leaves.

DESCRIPTION: It grows from eight to twelve feet in height, dependent on ground, hill or bottom land. The ears are uniform and of good size, and set from three to four feet from the ground; medium small red cob, husks easily; ears solid; surface quite smooth for dent corn; is very productive and an ideal corn. We fully recommend it to farmers and feeders as a most excellent variety.

PRICE: Postpaid by mail, sample ear, 25c; 1 lb., 25c; 3 lbs., 70c; 7 lbs (will plant one acre), \$1.00. By freight or express, at purchaser's expense: Peck, 75c; ½ bu., \$1.40; 1 to 5 bu. and over, \$2.25 per bu. Bags free. If wanted in ear, crated, add 75c per bushel to above prices.

Extra Early Varieties

Typical Ears, Gold Standard Leaming.

Tarrant County, Texas—Seed corn arrived today in good condition. Found it very fine. Am well pleased.

TAYLOR BLEVINS.

Marengo County, Ala.—I found your "QUEEN OF NISHNA" the best and most desirable corn for early feeding that I have ever seen. I began feeding this corn last season on third day of June.

S. W. COMPTON.

Pride of The North

This variety of early corn was originated by Mr. A. L. Goddard of Kossuth County, Iowa (one of the extreme northern counties of Iowa), twenty-five years ago, and at once sprang into prominence as the earliest of all Yellow Dent corns, and is a great favorite in the extreme northern states. It is a very pure and handsome Yellow Dent corn. The ears running from seven to nine inches long, with small cob and deep kernels; ears usually containing from fourteen to eighteen rows; seventy pounds ears shell out sixty-two to sixty-four pounds; will ripen and mature safely anywhere in ninety days; can be planted as late as June 25th, and make itself by September 10th. Good soil is capable of growing four to six stalks to the hill; many stalks have two ears and usually produce from forty to fifty bushels good, sound corn per acre.

PRICE: One lb., 25c; 3 lbs., 70c; 7 lbs. (will plant one acre), \$1.00, postpaid. By freight or express: Peck, 75c; ½ bu., \$1.40; 1 bu., \$2.50; 5 bu. or more, \$2.40 per bu. Bags free on board cars here.

GOOD SEEDS

By good seed we mean that which has been handled so that all of its germinating power has been preserved, aided by a constitutional vigor implanted in the grain by a judicious selection, cultivation and environment that produces a pure improved variety. This may be done by the common farmer, but is generally best done by the professional seed grower. He knows better how to do this, and has the proper facilities for doing the work. This is a business itself. What is said in this book as to seed corn will apply to all farm seeds and farm crops.

Extra Early Varieties For Northern or Late Planting

Minnesota No. 13 Corn

EXTRA EARLY YELLOW DENT. The Commanding points of excellence which place Minnesota No. 13 Corn at the head of all yellow dent varieties for northern planting are:

- Its earliness,
- Its enormous productiveness,
- Its adaptability to a great variety of soils and climates.

To Prof. W. M. Hays, formerly agriculturist at the Minnesota State Experiment Station and now Assistant Secretary of Agriculture, Washington, D. C., is due the honor of having originated this valuable extra early yellow dent corn. Not only is it fully as early as any of the yellow dent corns, but its record of heavy yields is such as to mark it as distinctly, and undoubtedly the most profitable of all the yellow dent varieties. It was the remarkable productiveness of the Minnesota No. 13 Corn that led Prof. Hays to say: "The inherited quality of corn to yield heavily or poorly all comes in the ten pounds, more or less, of seed planted to the acre," and never was the truth of this statement better exemplified than in Minnesota No. 13. Much time and labor was expended by Prof. Hays and his staff of assistants in breeding and perfecting this strain. It was first disseminated as Minnesota No. 13 Corn, the intention being to later give it an appropriate name, but it has since become so widely and favorably known as Minnesota No. 13 that it must continue to be so known. The Directors of the Minnesota Experiment Station consider it the best yellow dent corn for Minnesota, North and South Dakota and Wisconsin; other stations agree in this opinion. Mr. John S. Cole, Assistant Agriculturist at the Brookings, South Dakota Experiment Station, says: "At the county fair held here, Mr. George N. Kennard exhibited one bushel of Minnesota No. 13 Corn that I consider was the finest sample of yellow dent corn that has ever been displayed here. Mr. Kennard's corn was raised on clover sod, and is estimated to yield from sixty to eighty bushels an acre."

The ears are of handsome appearance, bearing sixteen to twenty rows of bright, rich yellow, smooth, wedge-shaped kernels packed closely on the cob from butt to tip. The ears average eight inches in length and are borne usually two on a stalk. No corn excels in quality the Minnesota No. 13; the cobs are well filled and the individual kernels plump and of good color.

Minnesota No. 13 thoroughly matures in ninety days when planted on favorable soil and in a good location and places it out of danger. A variety of corn which will show such valuable characteristics is an acquisition on any farm, especially for planting in the North, where early frosts are common, or for late planting. It may be planted as late as the second week in June and yet safely mature a crop.

Another point to which particular attention should be directed is its adaptability to changes in soil and climate. Many varieties fail to do well when subjected to new conditions. Minnesota No. 13 Corn, however, will thrive and produce abundantly on most any soil, and will do remarkably well under adverse conditions when other varieties would fail entirely.

The stalks grow to a height of seven to nine feet, and being leafy make excellent and very nutritious fodder.

We consider this a most valuable corn to grow, as do also the various experiment stations we have mentioned.

We especially wish to impress upon the intending purchaser one fact, and that is the importance of ordering early. Every spring, for several years, our supply of Minnesota No. 13 Corn has become exhausted before the season was over, thus disappointing many of our customers. When the supply is gone it will be impossible to fill further orders for this variety, as we will not send out anything but genuine seed of high germination. Large pkt., 10c; lb., 25c; 3 lbs., 70c, postpaid. By express or freight.

PRICE: Postpaid, 1 lb., 25c; 3 lbs., 70c; 7 lbs. (enough to plant one acre), \$1.00. By express or freight at purchaser's expense: Pk., 75c; ½ bu., \$1.40; 1 bu., \$2.50; 5 bu. and over, \$2.25 per bu. Bags free.

Minnesota King Corn

OUR OWN IOWA GROWN SEED (Yellow Half Dent). We regard this corn in some respects as the most valuable early corn ever sent out. There are varieties that under favorable circumstances will yield as much, but year in and year out, through fat years and lean years, there is, we believe, no sort that will do as well. It seems to possess a faculty of growing right along and making a crop during weather, and under conditions that would ruin other varieties. We do not know of any good reason why this should be so, unless it be that it roots more deeply; but not only is this our own experience, but we have received like testimony from hundreds of our customers who have tried it, the universal expression being that for ability to endure extremes of heat and cold, flood and drouth it has no equal. In appearance Minnesota King is remarkably distinct, being a half yellow dent; the kernels are very broad and of an extremely rich, golden color. Average height of stalk 8 feet; average distance base of ears from ground, 3 feet. The ear is of good size, eight rowed, cob small.

PRICE: Postpaid, 1 lb., 25c; 3 lbs., 70c; 7 lbs. (enough to plant an acre), \$1.00. By express or freight at purchaser's expense: Pk., 75c; ½ bu., \$1.40; 1 bu., \$2.50; 5 bu. and over, \$2.40 per bu.

Minnesota No. 13 Yellow Dent Corn.

Ratekin's Dakota Bloody Butcher

This is an excellent variety of extra early maturing corn, and is a great favorite and extensively grown in North and South Dakota, Minnesota and Northern Wisconsin and Michigan, as well as Eastern States and states of high altitude and where the seasons are short and frost expected early. It is a larger yielder among the early sorts, always making itself safely in from eighty to ninety days. Besides this it is a variety of great tenacity to resist and withstand unfavorable conditions, such as extreme wet or dry.

DESCRIPTION: The ears run from 10 to 12 inches long, with twelve to sixteen rows of solid compact grains of a reddish or flesh color, and of a very nutritious character for feeding, one bushel going almost as far as 1½ bushels of ordinary varieties. It usually makes a yield of from forty to fifty bushels per acre under normal conditions. We can fully recommend it for planting everywhere that quick maturing varieties are required.

PRICE: Sample ear, 25c; 1 lb., 25c; 3 lbs., 70c; 7 lbs., \$1.00, postpaid or prepaid by express to any point in the United States. By freight or express at purchaser's expense: Pk., 75c; ½ bu., \$1.40; 1 bu., \$2.50; 5 bu., and over, \$2.40. Bags free, f. o. b. here.

Extra Early Varieties For Northern or Late Planting

Silver King—A Corn for Northern States.

(WISCONSIN NO. 7.)

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.

In our more than fifty years' experience on the farm as a corn grower and breeder, thirty years of which have been devoted exclusively to the breeding of improved varieties of corn, we have tried out about every variety that has been introduced during that time and have discarded all that failed to come up to the requirements of the practical farmer, our trade and customers, or that failed to show a superiority over other leading sorts in actual field tests, including yield, adaptability to climate and soil, also widest range of usefulness. And in Silver King we have found one of the best early and most prolific varieties of white corn there is grown—one that we can most cheerfully recommend to our friends who are in want of an extra early prolific variety.

Development and Early History of Silver King

Attention was first directed to Silver King Corn through the efforts of Mr. H. J. Goddard of Winnishiek County, Ia., Winnishiek 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 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, and with little space between the rows.

A rather rough, rugged type was developed without giving much attention to most of the fancy show characteristics. A tendency to select ears with well filled tips probably had something to do with the fact that the original Silver King corn as produced by the Goddards has a tendency to produce a considerable proportion of ears large in circumference as compared with their length. The indentation is noticeably rough, though not harsh to the hand. The butt is rather fine for white corn, the kernels rounding out well around a shank which is inclined to be small.

In order to insure a good yield the Goddards attempted to get a corn which would grow few or no stalks that either were barren or which bore small nubbins. They did not consider more than one ear per stalk objectionable provided the ears were well developed. So when this corn is planted on good soil its tendency to prolific production is very noticeable, many hills with three stalks producing four or five good ears. Even six good ears have been found in such hills.

Next after Mr. Goddard, Will Banks, who lived in Kossuth County, Iowa, had much to do with Silver King corn. Though a quiet, unobtrusive man who did not call attention to the prizes he won annually on his Silver King corn at the meetings of the State Agricultural Society, Mr. Banks developed Silver King corn rapidly in his county. In the fall of 1903 his corn easily outranked all other entries at the first corn show held in his home county.

Space will not allow a detailed statement of first prizes, sweepstakes and grand championships won on Silver King corn by two Iowa boys since this corn was first brought to their farm. But with its introduction there came a new source of income, for not only has the yield of corn been increased and its quality improved, but the numerous prizes which have been won during the five years of its cultivation on this farm approximate a value of \$1,200.

It is interesting to note that when this corn was first brought to the father's farm by one of the boys it was looked upon with small favor by the father. The ears in the original lot of seed are said to have been "small, scrubby looking things." For some twenty-five years he had been growing and selecting a corn of his own. Knowing positively the sterling worth of this variety he was loath to believe that it was to be surpassed. He demanded positive proof. As a result both corns were grown on the farm each year five years until the season of 1912, when the Silver King was given full possession.

Unfortunately for Iowa, the wonderful value and possibilities of this corn were long overlooked, except in a few localities, although especially well adapted to conditions in Iowa, because of forty years' selection, its true value was not generally recognized until after its introduction into a neighboring state, Wisconsin, where in a few years it became more generally grown than any other dent variety.

Silver King corn was first introduced into Wisconsin in 1904 by Prof. R. A. Moore, who assisted in the judging of corn at the Kossuth County (Iowa) Farmers' Institute in the fall of 1903. His attention was attracted to the general desirable

(See next page for description.)

Extra Early Varieties For Northern or Late Planting

(Continued from preceding page.)

Silver King Corn qualities of Silver King there exhibited, and before leaving, he arranged for the shipment of thirty bushels of this variety to the Wisconsin Experimental Station at Madison, to test thoroughly its adaptation throughout that state.

In the work with Silver King corn that followed at the Wisconsin Experimental Station to increase the yield and proportion of perfect formed ears, from 17 to 18 per cent of all ears gathered were classed as good seed ears. Following this preliminary work the Silver King corn was distributed to all parts of the state through the agency of the Wisconsin Experimental Station, and some 1500 seed corn stations established for the distribution of the seed.

In less than four years after its introduction into that state, 12,000,000 bushels of Silver King corn were produced, indicating the rapidity of its development. In the 1906 report of the Wisconsin Experiment Association, Professor Moore, who had entire charge of the testing and distribution of this corn in that state, says: "Wisconsin No. 7 (Silver King) has given general satisfaction throughout a wide range of territory, and readily adjusts itself to various conditions and environments. From data received I feel confident that we have in No. 7 (Silver King) a variety superior to any other white corn grown in the state."

In the 1907 report, Professor Moore states that in trials carried on at the Wisconsin Experiment Station that year, a yield of 98.6 bushels per acre was secured, which at that time was the largest yield ever secured there from any variety, and the average yield for the whole state for three years was 57 bushels as compared with 33 bushels, the average of all other varieties.

DESCRIPTION: In appearance the corn is a beauty. Ears averaging eight to ten inches, always filled out to the tips, and very uniform in size and type. The corn is pure white in color with good length kernels set compactly in straight rows. It is a strong grower, early enough to mature as far north as St. Paul, Minnesota, and is especially adapted to resist cool weather. It has a decided double-ear characteristic, one reason for its fine yield records.

VALUE: We feel that we can hardly rate the value of this corn too high. It gets ripe and it produces the yield. Professor Moore of Wisconsin Experiment Station says, "PUSH IT HARD, IT WILL STAND IT." Hundreds of the leading farmers of Minnesota and Wisconsin swear by SILVER KING.

PRICES: Sample ear, postpaid, 25c; 1 lb., postpaid, 25c; 3 lbs., 70c; 7 lbs. (enough to plant one acre), \$1.00. By express or freight: Peck, 75c; ½ bu., \$1.40; 1 bu., \$2.50; 2 bu., \$4.75; 5 bu. and upwards, \$2.25 per bu. Bags included, f. o. b. Shenandoah.

Extra Early: Queen of Nishna For Northern or Late Planting

The Earliest, Hardest, Most Productive, Purest Yellow Ninety-Day Corn Grown.

Queen of Nishna

With regard to this corn (first introduced by us in 1885, the following year after we engaged in the seed corn business), would say: While we have tried out and experimented with a great many early varieties of yellow dent corns, we have never yet found any that surpassed or equaled RATEKIN'S QUEEN OF NISHNA in earliness, hardness and productiveness; thus we have found it the most valuable early yellow dent corn for general field crop, also for late planting and replanting throughout the corn belt states there is grown. It seems to possess a natural faculty of growing right along through wet or dry seasons and making a good crop under conditions that ruin other sorts. We cannot account for this on any other grounds than it is more deeply rooted, drawing the moisture and strength of the ground from a greater depth and distance than other, ordinary sorts.

During our experience in growing and sending out seed corn for the past thirty years, we have sent hundreds and thousands of bushels of this variety to the farmers of North and South Dakota, Minnesota, Wisconsin, Michigan, New York, and the New England States; also to the mountain states of the West and as far as the Pacific coast; in high altitudes where the nights are cool and seasons short; besides have sent it to all the corn belt and southern states, where for other reasons early prolific varieties are wanted and required. During this time we have received testimonials numbering into the hundreds and thousands, all bearing the universal expression and commendation for its ability to endure extremes of heat, cold, flood and drouth, also for uniform good yields and early maturity. Our word for it, it has no equal as an all around big cropper for an early maturing yellow dent corn.

DESCRIPTION: The ears ordinarily run from seven to ten inches long, with sixteen to twenty rows of compact grains solidly set on a small red cob. The stalks grow from seven to ten feet high, dependent upon the ground where planted, and under ordinary conditions make a yield of from forty to sixty bushels per acre. We cannot recommend this corn too highly for all the purpose, we have named, and are sure that no farmer who plants corn will make any mistake in planting at least a part of his crop to this excellent variety of early corn.

PRICE: Sample ear, 25c; 1 lb., 25c; 3 lbs., 70c; 7 lbs., \$1.00, postpaid or prepaid by express to any point in the United States. By freight or express at purchaser's expense: Peck, 75c; ½ bu., \$1.40; 1 bu., \$2.50; 10 bu. and over, \$2.25 per bu. Bags free, f. o. b. here.

The Alaska-Northwestern Dent

This corn is in a class of its own; is a Yellow Dent. It was introduced by us six years ago throughout North Dakota, South Dakota, Minnesota, Wisconsin and northern Michigan; also in the New England States, where the season for corn is short; everywhere our customers have been greatly pleased and loud in its praise. Like all other varieties of corn it gives best results on good, strong ground. Many of our customers have grown as high as SIXTY TO SEVENTY BUSHELS PER ACRE from it. Usually, however, it yields from thirty to fifty bushels on ordinary corn ground and matures beyond danger of frost within eighty days. Under ordinary conditions it grows to the height of six to eight feet; average distance of ears from ground two and a half feet. The ears run from seven to ten inches long, very deep grain set on a small cob, fourteen to eighteen rows on cob; so sound you can plant very early and depend on 99 to 100 per cent germinating good and strong. One bushel will plant seven acres of ground. Our supply of this seed is limited. You will do well to order early.

PRICE: Sample ear, 25c; 1 lb., 25c; 3 lbs., 70c; 7 lbs., \$1.00, postpaid or express charges prepaid to any point in the United States. By freight or express at purchaser's expense: Peck, \$1.00; ½ bu., \$1.75; 1 bu., \$3.25; 5 bu. and over, \$3.00 per bu. Bags free f. o. b. here.

UTAH AGRICULTURAL COLLEGE (Experimental Station).

Logan, Utah, Jan. 4.

It gives me great pleasure to report the yield of seed corn donated by you last year as follows: The Diamond Joe's Big White yielded eighty-nine and six-tenths bushels per acre; Queen of Nishna yielded seventy-four and two-tenths bushels. Both of these varieties of corn are good yielders here, yielding also a large quantity of fodder per acre. I should be pleased to have you send me for experimental purposes some Speltz or Emmer; also a few pounds of Ratekin's Giant Shenandoah Fodder Corn and a few pounds of Red Cob Fodder Corn. Very truly,

J. C. HOGENSON, Agronomist.

Marengo County, Ala.—I found your "QUEEN OF NISHNA" the best and most desirable corn for early feeding that I have ever seen. I begun feeding this corn last season on third day of June.

S. W. COMPTON.

Tarrant County, Tex.—Seed corn arrived today in good condition. Found it very fine. Am well pleased.

TAYLOR BLEVINS.

Extra Early Varieties For Northern or Late Planting

Ratekin's Gold Standard—90 Day Corn

A Great Corn for Short Seasons. Beats Early Drouth and Frost.

It is the early maturing Yellow Dent Corn you have been looking for. The stalks grow from seven to ten feet high, depending on the land it is planted on; sets ears about three feet from the ground; ears run from eight to ten inches long, with sixteen to twenty rows, very deep grains set on a small red cob, and shells out sixty to sixty-four pounds per seventy pounds of ears. It is a pure bred corn; every stalk producing at least one good ear and many of them two, and yields from forty to seventy-five bushels per acre, and will be ready to husk and crib for feeding and market fully three weeks ahead of ordinary varieties. We can conscientiously recommend this corn as the acme of perfection in early maturing and as a wonderful yielder, and we cannot too strongly urge every farmer to plant liberally of it, for an early, quick maturing corn where late or replanting is necessitated from any cause.

We have received reports from fully 30 per cent of those who planted of it last season and without exception and from everywhere come the most glowing accounts of the performance of this variety, both in early maturity and tremendous yields. We can fully recommend it to corn growers everywhere, and especially where the seasons are short, or where wanted for early feed or for late planting. It will make a good crop if planted any time before June 25th. From every point, including productiveness, yield and early maturity, depth of grain, solidity of ear and smallness of cob, our new **GOLD STANDARD** stands at the head of them all. Don't wait, but send your order in now. It will cost you no more, if as much, as to send later; then by getting your seed early you have it at hand when you are ready to plant.

PRICE: 1 lb., 25c; 1 ear, 25c; 3 lbs., 70c; 7 lbs. (enough to plant an acre of ground), \$1.00, postpaid or by express, prepaid to any point in the United States. By freight or express at purchaser's expense: Peck, \$1.00; ½ bu., \$1.75; 1 bu., \$3.00; 5 bu. and over, \$2.75 per bu.; bags included, f. o. b. here. If wanted in the ear, crated, add 75c per bushel to foregoing prices.

White Cap Dent—Large Eared Early Variety We have grown and handled **WHITE CAP YELLOW DENT** quite extensively for several years and regard it as a very early maturing corn and an enormous yielder for an early corn. It, however, is not quite as early as "Silver King," white, or "RATEKIN'S QUEEN OF NISHNA," "GOLD STANDARD 90 DAY" or "THE ALASKA NORTHWESTERN DENT," but is equally as early as "Pride of the North," and we regard it as a much larger yield, 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 and grown it are wonderfully well pleased with it, and the increased demand for it, also reports we have received about it, 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: Shelled, by mail, postpaid, 1 lb., 25c. By freight, your expense, ¼ bu., 75c; ½ bu., \$1.40; 1 bu., \$2.50; 2 bu. or more, \$2.40 per bu. Bags free.

WE ARE SEED CORN GROWERS AND NOT SEED CORN DEALERS—HAVE MADE THE GROWING AND BREEDING OF SEED CORN A SPECIALTY FOR THIRTY YEARS PAST.

Extra Early Flint Seed Corn

IT'S ALL IN THE SEED

DIBBLE'S MAMMOTH YELLOW DENT

(Our stock of Flint Corn is all shelled.)

Every year from June 1st to September 1st we devote our time looking after our contract growers and investigating different sections of the country to find the best varieties adapted to the various climatic conditions. While in northern New York some years ago on an inspecting tour we found a Flint Corn known all over northern New York and the New England States as "DIBBLE'S MAMMOTH YELLOW FLINT," and everywhere was extolled as the most wonderful of all Flint varieties. So favorably impressed were we from what farmers told us we went directly to the originator, Mr. Dibble, and procured a supply of seed from his private stock for our planting purposes. Since then we have been growing and selling it with most satisfactory results all over the Dakotas, Minnesota, Wisconsin, Michigan, New York and the New England States; also sent it to every state in the Union. In short, we believe it to be the earliest, best and most productive flint corn grown. The stalks average nine to twelve feet high, dependent upon ground, each stalk bearing from one to three ears. It leaves very profusely, nearly to the ground, and both the leaves and stalks are very nutritious and stock eat every vestige of the stalks as well as the leaves or blades. The ears average from ten to fifteen inches in length. It is very early to mature, and if planted late or when the ground is warm it will ripen and be ready for the knife within sixty to seventy days from planting. The seed we furnish our customers is from hand picked ears, running ten inches and over in length, thoroughly dry, well cured and can be depended upon to grow almost to a grain.

Owing to the superior advantages of this corn over other sorts of its class we want to urge all who grow corn in the far north, where the seasons are short and where frost may be expected the last of August to September 1st, to order early.

PRICE: 1 lb., 25c; 3 lbs., 70c; 7 lbs., \$1.00, postage or express prepaid to any point in the United States. By freight or express, not prepaid: Peck, 75c; ½ bu., \$1.40; 1 bu., \$2.75; 2 bu. or more, \$2.65 per bu. Bags free.

Lincoln County, Miss., July 31st.

Ratekin's Seed House, Shenandoah, Iowa:

Gentlemen—Your "Silver Mine" and "Diamond Joe" Seed Corn has proved our salvation here this year on account of its earliness in getting ahead of the dry weather. On one measured acre we gathered seventy-five bushels of "Silver Mine." We are now raising a crop of "Pride of Nishna" on the same ground. Our neighbors called us foolish when we planted your northern seed corn, but now the laugh is on the other side, as the best any of them have done is about twenty-five bushels per acre. You can count on us a permanent patron in the future. We also wish to thank you for prompt, all round courteous treatment during the whole time we have been doing business with you. Yours very truly,

CAPT. F. A. JEMIGAN, Mgr.

SANFORD'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 and is said to produce 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: Packet, 5c; lb., 25c; 3 lbs., 70c, postpaid. By freight or express, not prepaid: Peck, 75c; ½ bu., \$1.40; 1 bu., \$2.50; 2 bu. or more, \$2.40 per bu.

THIS IS EASY ENOUGH

After good ground comes good seed and good varieties, followed by good cultivation. No intelligent farmer can commence aright unless he is first possessed of the two former, with a will and determination to perform the third; for without good soil, good seed and good varieties I trust no farmer will expect a premium crop. However, even with ordinary or poor soil he can beat and distance the average of the country by far if he is possessed only with the two latter things named, good seed and varieties, and plenty of industry and proper cultivation. It is profit in anything that counts. If thirty bushels of corn to the acre pays expenses only then sixty or seventy bushels would give a handsome profit.

Ratekin's Iowa grown seed corn will do this if you, Mr. Farmer, will do your part. We want you to read every page of this book and then say, "What others have done I, too, can do."

BUY YOUR SEED CORN DIRECT FROM THE GROWER; THEN YOU KNOW WHERE IT IS GROWN. WE ARE GROWERS, NOT DEALERS.

Field Corn—Early Flint Varieties

Longfellow Flint is an eight-rowed yellow flint of the Canada type; ears cylindrical, running from ten to fifteen inches long; color rich glossy yellow. Average height of stalk seven to nine feet; average distance base of ear from ground three feet. Weight of all field and flint corns fifty-six (56) pounds per bushel.

PRICE: Postpaid: Large pkt., 10c; lb., 25c; 3 lbs., 70c. By express or freight at expense of purchaser: $\frac{1}{4}$ bu., 75c; $\frac{1}{2}$ bu., \$1.40; 1 bu., \$2.50; 5 bu. and over, \$2.25 per bu. Bags free.

Ratekin's Improved Early Yellow Flint

An eight-rowed yellow flint 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 to eighty days. This corn is well adapted to the Northwest, and is said to have produced 194 bushels of ears to the acre in Vermont and other New England states. Has given excellent results in Minnesota and other northern states. Excellent for ensilage, and is often used here for replanting.

PRICE: Packet, 10c; lb., 25c; 3 lbs., 70c, postpaid. By freight or express, not prepaid: Peck, 75c; bu., \$2.50; 2 bu. or more, \$2.40 per bu.

WHAT IS A BUSHEL OF SEED CORN WORTH?

THE INHERITED QUALITY OF CORN TO YIELD HEAVILY OR POORLY ALL COMES OF SEED PLANTED.

People frequently write us that they would like to buy seed corn from us, but cannot because the prices are "too high."

The average price of our seed corn is less than \$2.25 a bushel, including bag.

IS IT WORTH IT?

A bushel of seed corn will plant from six to eight acres. To use our seed will cost, say, thirty cents an acre more than if common crib or home grown corn is planted. It is, therefore, evident that if our seed produces one bushel more to the acre, mind **ONLY ONE BUSHEL MORE**, than the home seed that the entire cost of the seed and freight is paid for by this extra yield.

AGAIN, IS IT WORTH IT?

The corn we sell is grown from seed which has been brought to such a degree of perfection as to render it of almost priceless value. It represents the labor of many years and the expenditure of a very large sum of money. It has behind it the history of big crops. We know that when we plant it that barring flood or drouth it will yield heavily. At the proper time we go through our fields and detassel. When the corn comes to our warehouse it is hand-picked down to such a point as to give us on the average about ten bushels to the acre of seed that goes to our customers; the balance is sold for feed. Is this care worth thirty cents an acre to anyone planting corn?

GERMINATION.

We thoroughly test every lot of corn before we send it out to our customers. At the present writing we have just completed testing thirty separate lots of seed corn. Two tests were made of each lot. Every lot, except one, germinated 98 to 100 per cent, and that one grew 94 per cent. Never in the history of our business have we had better germinating corn than is now in our warehouse. But wherever you may buy you should know for yourself that your seed corn grows before you plant it. We sell our seed under the following

GUARANTEE:

That it be tested promptly on arrival, and if it does not germinate to the entire satisfaction of the purchaser it shall be returned within ten days from time received at our expense and the money paid for same will be immediately refunded without question.

WHEN TO ORDER.

It is of great advantage to both our customers and ourselves if orders are placed early. This applies not only to corn, but to all seeds. After April 1st several important varieties are usually sold out and cannot be replaced. The "spring rush" is then on; employees become wearied with the long strain of night and day work, orders and shipments are more likely to be delayed, and errors are more likely to occur. In our customers' interests, therefore, as well as our own, we urge early orders.

From ST. LOUIS POST-DISPATCH.

Southwestern Iowa is the natural and most favored home of corn in the world, where it attains its greatest perfection. This is no idle boast. The claim can be easily established. The Nishnabotna Valley is wonderfully productive. The rich soil extends four, six and even eight feet in depth, full of life-giving qualities that make the monster crops of corn. Mark a square twenty-five miles eastward from the banks of the Missouri River and ten miles south to forty miles north of the state line, and there is not another such productive spot in the world.

For thirty years pioneers in the seed corn business, the Ratekins, have talked "the breeding up of corn." At first they were laughed at for their pains, but their advice and persistence has resulted in the raising of unheard of crops. One hundred bushels to the acre is no uncommon thing. But such crops are secured only by carefully selected seed and varieties and by a mixture of brains with its cultivation.

If you want to improve your corn and increase your yield, don't fool away your time sending to amateurs for seed because they offer it but a little above elevator prices. Cheap prices may seem attractive to some, but it's better and cheaper to pay **FIVE DOLLARS PER BUSHEL** for good seed corn; thoroughbred, of inherited-productive qualities, than to plant some seed as a gift.

Longfellow Flint.

Five Grand Varieties of Fodder Corn

Cutting a Field of Ratekin's Giant Shenandoah Fodder Corn.

FOR YEARS WE HAVE BEEN PREACHING THE GREAT VALUE AND IMPORTANCE OF GROWING FODDER AND ENSILAGE CORN TO THE FARMERS. The dry seasons of the past few years and especially the last past season, have assisted us in bringing these facts home to them, and has fully aroused them to its great importance as never before. From all reports coming to us from everywhere there was many times over more corn cut for fodder and ensilage purposes the last year or two than any half dozen years in the past. When dry weather came on in the early part of the season and other crops were burned out and withered under the blasting hot winds the farmers planted corn for fodder and ensilage because it was too late to plant other crops. They later found they had hit the mark in so doing. Now every one of them will hereafter plant a liberal acreage for fodder and ensilage purposes, because they have found it one of the most profitable crops they can grow, not as a makeshift, but as a necessity.

We make a specialty in seed corn for fodder and ensilage purposes and our customers will find our varieties of the very best and highest quality and seed they can depend upon to grow.

The Silo We are not selling Silos. We have none for sale. We have no stock or interest in any factory. There are many good Silos manufactured. We do not know which one is best. But we do know that every farm and farmer who has ten, fifteen or twenty head of stock, or more, should have a silo. Silage is good for the cow, the horse, hog, sheep, colts and calves. The silo is endorsed by every agricultural college and every leading agricultural publication, and by all who have used them. They are money savers and money makers, and keep your stock healthy, thrifty and fat at a small cost.

The value of a silo is unquestioned. By its use crops may be saved in dry seasons that could not otherwise be preserved. By its use the whole corn crop may be saved instead of only 60 per cent of it, as now, when the ears only are harvested. By its use stock may be fed succulent feed at all times and thus enjoy June conditions the year around. By its use crops are placed under shelter, where they are handled in bad weather with the utmost ease and comfort. By its use better and quicker results are assured in either the beef or dairy herd. By its use the farmer feels that he is up to date, because he does his work easier, quicker and with more profit. He has more time and more money. He is at peace with himself, his neighbors and his dumb animals. He is an optimist. He has made a good investment.

Varieties of Fodder Corn Corn fodder may be divided into five classes, viz.: Large Southern Varieties, Medium Dent Varieties, Early Dent Varieties, Flint Varieties and Sweet Varieties. Each of these has its friends. All may be successfully grown for fodder in almost any latitude. The merits of each class are briefly stated under their respective headings. If further information is desired we shall be glad to supply it as far as lies within our power, and will be pleased to make recommendations when desired. There is one point we want to impress on stockmen, dairymen and others using corn fodder and that is to place your orders early. By so doing you secure the benefit of the present low prices. You can test the seed and have corn. Prices same as red cob fodder corn.

Ratekin's Giant Shenandoah Fodder Corn

Beyond a doubt this is among the best fodder corn, either to feed green right out of the field, or to put up for the silo, or to cure and stack away, cropping as high as thirty-five tons to the acre. It is sweet, tender and juicy, and furnishes more nourishment than any other variety; has short joint and therefore an abundance of leaves and blades, and growing as tall as the tallest, thus making it of extraordinary productiveness. The only fault we have ever heard of this fodder corn is that it grows so large and so tall it makes it harder to handle. We measured one stalk from our crop last fall that was eighteen feet and four inches in height and measured one and one-half inches in diameter at the base, and contained thirty-two pairs of broad, long blades.

Drill one bushel to the acre in rows about three and one-half feet apart. Five or six kernels to each foot in the row, plow and cultivate until three feet high, stirring the surface of the ground often, after which it will take care of itself.

PRICE: Peck, 75c; ½ bu., \$1.40; 1 bu., \$2.25; 2 bu., \$4.25; 5 bu. and over, \$2.50 per bu. Bags free, f. o. b. here.

Red Cob Fodder Corn

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: By freight or express at purchaser's expense: Peck, 75c; ½ bu., \$1.40; 1 bu. to 5 bu., \$2.10 per bu. Bags, f. o. b. cars here.

Fodder Corn

Medium Dent Fodder Corn

There are many who prefer for fodder smaller growing corn than the large and later varieties, claiming for it the following advantages: First, that it is more readily handled by the corn harvester, or even the grain binder; second, that it matures earlier and gives well formed and partially or fully ripened ears; third, that it is more easily cured; fourth, that the smaller stalks make finer and richer fodder; fifth, that the fodder is more easily handled in putting through the silage or fodder cutter, or if fed long is more easily handled in the manger.

We believe this variety will best please the advocates of the type of corn above referred to. It is tall growing, averaging 7 to 10 feet. It is very leafy. It has a small stalk. It will form, even in Northern Minnesota and in North Dakota, good sized ears, thus adding to its feeding value.

Highly recommended by the best ensilage authorities for northern states, is True Yellow Leaming, produces large quantities of leaves. Bushel, \$2.25; 5 bu., \$7.25.

EARLY YELLOW DENT FODDER CORN. When sown thickly in drills, at the rate of from one to one and a half bushels to the acre, this seed will give a surprising amount of rich feed, relished by all stock. It can be cut and run through an ensilage cutter for the silo just before maturity, or it may be fed in the rack.

PRICE: Bu., \$2.25; 2 bu., \$4.25; 10 bu., \$21.10 per bu. Bags free.

Flint Varieties for Fodder

The farmers of Maine, Vermont, New Hampshire and Massachusetts use for fodder corn Early Flint varieties almost exclusively. There is absolutely no waste to this class of corn, as the stalk is as greedily eaten as the leaves, and the feeding value is superior to everything but the Sweet Fodder or Early Dent Varieties.

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 anywhere in from sixty to seventy days, safely beyond danger of frost, good corn weather. It grows stalks averaging from 9 to 12 feet high and leaves or blades from tassel to ground, and both leaves and stalks are very nutritious, and stock devour every vestige of it, stalks and blades, as readily as they eat clover hay. It produces one, two and three ears, running 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 in every respect for everything and everywhere; east, west, north or south, for early or late planting, where the seasons are short or in high altitudes where the nights are cool; also for early feed. Don't overlook or pass this Flint Corn up. For ensilage or fodder plant rows $3\frac{1}{2}$ feet apart, drilling eight to ten kernels to the foot in the row, and cultivate same as general field crop.

Stowell's Evergreen Sweet Corn

Among all the splendid varieties for fodder and ensilage purposes we have here listed we regard Stowell's Evergreen Sweet Corn as one of the most valuable varieties grown, either for fodder, canning purposes or for seed purposes, either of which makes it a most desirable and profitable crop. In addition it is a most excellent variety to cut and throw out to milch cows, horses, hogs and the colts and calves during the summer and fall months, when grass is dried up and pasture short. As a green fodder fed in this way one acre will furnish as much feed as eight acres of grass. The sweet, juicy stalks give it a flavor that makes stock like it as they like nothing else, and stock will devour the last vestige of the stalks and blades as clean as they would wipe up the best clover in the midst of winter. It is claimed by all dairy farmers that it will not only greatly increase the flow of milk, but will add a third to a half to the cream production. All we have said about its wonderful qualities as a green feed may be said with equal truth and force when it is cut up and put into shocks and fed during the winter months. Even in its dry stage stock of all kinds will eat every vestige of the stalks and blades. There is no waste whatever in this corn.

Plant with drills in rows $3\frac{1}{2}$ 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 or surface cultivation until three feet high. This variety of corn will make you from fifteen to thirty tons to the acre.

PRICE: 1 lb., 25c; 3 lbs., 70c; 7 lbs., \$1.00, postpaid or express charges prepaid to any point in the United States. By freight or express at purchaser's expense. PK., \$1.00; $\frac{1}{2}$ bu., \$1.75; 1 to 5 bu. and over, \$3.25 per bu. Bags free, f. o. b. here.

IN CONCLUSION: The one problem that confronts every farmer who keeps stock is how to get feed to supply his horses, cattle and hogs. The corn plant is the foundation food, and every portion of it should be used. A good silo on every farm where stock is raised and where corn can be grown solves the problem. But where the farmer don't feel able or conditions do not justify he should at least grow a few acres of Fodder Corn and take care of it in the most practical way he can. We cannot too highly recommend **STOWELL'S EVERGREEN** where you have only a few horses or cows. Plant a few acres, if no more, and our word for it you will be pleased. Don't plant too early, nor when the ground is cold and wet. Sweet corn will sour in the ground when other field varieties will grow under wet, cold weather conditions.

For Grain and Fodder Crop Combined

We want to especially recommend our Gold Standard, Leaming, Ratekin's Mammoth Yellow Dent, Pride of Nishna, Diamond Joe's Big White, Iowa Silver Mine and Imperial White Corn. Either of these varieties will give you the best possible combination for a grain, fodder or ensilage crop. All of them mature early, and each have a very heavy stalk, broad leaves and lots of them.

Stowell's Evergreen.

Ten Thousand Silos Built in Iowa in 1912

As against 4,000 in 1911. So wires H. M. Cotrell, Agricultural Commissioner of the Chicago & Rock Island Railroad Company to the Chicago office of that road September 1st, 1912. The above would be a fair index of the favor and utility of the silo, as seen and experienced by Iowa farmers without further proof, but from our personal travels and observations the past fall we venture the belief that there were double the number of silos built in 1913 as were built in 1912.—J. W. R.

Sullivan County, N. Y., May 7th—Seed corn, potatoes and nursery stock received all right.—Jno. Schaefer.

Day County, South Dakota, June 1st—I write to say the seed corn to hand all O. K.—M. A. Bates.

Windsor County, Vermont, May 31st—I received the seeds ordered from you all O. K. which was very satisfactory. Thank you for promptness in hurrying them along.—R. Link.

Gentlemen: You will remember I sent to you for some of your Gold Standard Leaming Seed Corn last spring and you may be interested to learn what my experience and results from it were, and it does me good to tell you. In the first place, the ground was put in the best of order and corn planted when conditions were good, and it grew to a grain; never had a finer stand and such a crop as I grew has never been witnessed in this part of York state. People heard of it, and many of them came miles to see it. To say I am well pleased does not tell the story by half. Send your new catalogue as soon as ready for mailing. I will send to you for my spring's planting. With best wishes,

Rochester, N. Y., Dec. 10th.

J. R. RODGERS.

The New Alberta Oats

Big Oats Make Big Yields and Big Money

The New Alberta

The Biggest, Best and Grandest variety ever introduced into this country. A BIG, HEAVY YIELDING OATS HAS BEEN OUR HOBBY FOR MANY YEARS! WHY? Because if you have noticed the crop and agricultural reports throughout the Corn Belt and the oat growing districts you have observed that the average yield of oats does not run above thirty bushels per acre. Do you know the reason for this? It's because farmers continue to sow old run out, run down sorts year after year, when it is a well-known fact that there is no cereal crop grown that runs out and degenerates as quick as oats.

Ratekin's New Alberta Oats

This oats is making its fourth annual bow to you. We have now been handling these Western Canada oats for the past three years, and so enormous has been the demand for them each year we were several thousand bushels short; but we believe that for 1914 we have enough to supply the demand. It is, however, always a safe proposition to order your seeds of all kinds early and before stocks are broken and at a time when we can give personal attention, as far as possible, before the rush comes. These oats come from the greatest oat growing country in the world, ALBERTA, IN WESTERN CANADA.

We first introduced these oats four years ago, and they gave such wonderful results everywhere from the start we were encouraged the following year to purchase fifteen car loads, or about twenty thousand bushels, and sent out over fifty thousand

sample packages with our catalogues. Everywhere they captivated the grain growing farmer and as a result we were sold out long before the season was over, and could have sold many thousand bushels more if had had them. Everywhere we sent them they proved a great success and **THE WONDER OF THE OAT WORLD**. In view of the reports and results that came to us, the increased demand and enormous yields everywhere, we established a purchasing agent at Calgary, Alberta, in the great grain growing district of Western Canada, in 1911, and have maintained an agent there each year since. Our agent at that point had been associated with us here in the seed business for many years, one who has made the study of cereal farm seeds a specialty for years. Since employing him we have had him inspecting the growing crops before and at harvest time, locating the best, only, that that wonderful small grain country produces, and we are pleased to announce that we have made immense purchases from the cream of the very best **NEW ALBERTA OATS** to be found or located in that country for our trade, and can assure our friends that our seed oats this year are the equal or of superior quality to any we have ever imported from that country before.

The New Alberta—What They Are Like

The illustrations bordering this page are a correct illustration of average kernels of these oats. You will notice they are a big, fat kernel, big enough to please anyone looking for something just a little better than anything ever seen in the oat line, and an oat that weighs out almost as heavy as wheat; usually from forty-four to fifty pounds to the measured bushel and making a yield of ninety to 150 bushels to the acre. Has a big, strong, stiff straw, standing up on any kind of land, with sprangled head ranging from 12 to 18 inches long, and some even much longer.

I can confidently recommend these oats and assure all that they will come up to the full measure of your expectations. In fact, out of the thousands of bushels we have sent out **WE HAVE NEVER HAD ONE SINGLE COMPLAINT or DISAPPOINTED CUSTOMER.**

NOW WHAT I WOULD LIKE TO SEE this year would be that every farmer who has one acre or fifty acres to sow in oats would be to **SOW EVERY ACRE TO our NEW ALBERTAS**. It will require $2\frac{1}{2}$ bushels per acre. The seed will cost you for one acre but \$5.00, or \$18.00 for enough to plant four acres. They will make you a yield that will be an eye-opener to you and to your entire neighborhood, and will enable you to sell all your surplus at a handsome price for seed.

(Continued on next page.)

(Continued from page 29).

Ratekin's New Alberta Oats

On the preceding page we have given a true photographic illustration of the kernels of the **NEW ALBERTA OATS**, and the accompanying illustration shows a head of over 200 kernels on one stalk. By observing closely you will see an average of three kernels to the pod. This shows what good breeding does. These oats, practically all the heads, show two to four kernels to the pod, all big, meaty kernels, free from whiskers and husks and "as heavy as lead."

GET THE GENUINE ALBERTA OATS from headquarters. We are the only Seed House in America that keeps a man on the ground during the growing, harvesting and threshing season, thus insuring **GENUINE SELECT-PURE STOCK**.

Two years ago we sent out thousands of samples of these oats. A wealthy banker of Chicago and a large land owner in Central Illinois, while visiting at his farms, ran across a sample of these oats. He immediately wired us to ship 100 bushels to his manager. Planting season was at hand, and the seed was started the same day his telegram was received, and inside of six days the seed was all in the ground. Do you know the results? From forty acres which he sowed there were grown 3,600 bushels and there were sold from the threshing machine 3,100 bushels to the surrounding farmers for seed purposes at \$1.00 per bushel, thus obtaining \$75.00 per acre, with 500 bushels left for his own use and seeding purposes another year. Any active, energetic, enterprising farmer can do the same if he has got the stuff in him.

EVERY GRAIN GROWING FARMER SHOULD SOW AT LEAST FIVE OR TEN ACRES OF THESE OATS THIS YEAR. Get in shape to grow your own seed another year, and supply your neighbors with their seed. All will sit up and think with their hats off when they see you harvesting a **HUNDRED BUSHEL CROP** while they are reaping but twenty to twenty-five bushels from common old run out, degenerated stock destitute of life, vigor and hardiness to make a strong, robust, quick growth.

Some farmers think our prices too high for seed enough to plant their entire crop, but we can't sell these select seed oats at less, owing to freight 800 miles and duty on oats from Canada, but the increased yield in quantity and quality make them the cheapest seed anyone can plant or sow.

PRICES: Lb., 25c, postpaid; 8 lbs., postpaid, \$1.50. At purchaser's expense, by express or freight; pk., 90c; ½ bu., \$1.00; 2 to 4 bu., \$1.90; 10 bu. and over, \$1.80 per bu. Sacks free, f. o. b. Shenandoah.

LOOK HERE!

The New Alberta Oats.

Take a look at the above picture. It shows the character and type of these oats. They were all grown on new, clean, virgin soil, free from foul weed seeds.

The oats bought of you made good. We have just threshed from sixteen acres 1,310 bushels, machine measure; weight 42 pounds to measured bushel.

The oats I raised from your seed were simply great. They stood up in good shape and were the banner piece of oats for the season.

Ratekin's Seed House.

Gentlemen: I sent to you for ten bushels of oats last spring. I have just threshed from them 576 bushels of the finest oats I ever saw. I never saw anything to equal them. They are all you claim for them. Truly yours, **OLE OLSON.**

Clay County, Mo.

I sent to you for some of your New Alberta Oats two years ago and sowed them on ordinary ground. I still have on exhibition here some of the largest heads that I cut from my crop, some of them measuring 23½ inches in length and a large majority of them running 16 inches. I much regret that I did not send a bushel of them to you. Very truly yours, **A. A. MILLER.**

Gilead, Neb.

Send me your seed catalogue; also prices on seed oats in fifty bushel lots and over. I bought seed oats from you before and was pleased with results, and for this reason would be glad to have your best quotations and lowest prices. Respectfully, **GEORGE MASSING.**

My oats stood five feet high; made eighty bushels per acre; were the admiration of the surrounding country. The heads measured an average of 10 to 12 inches. **E. J. BROWNING, Franklin Co., Vt.**

Ada, Ohio.

Received seed oats all O. K. March 26th, and find them A No. 1. Am well pleased. Accept thanks for your prompt action. I remain, yours truly, **JOHN SEARSON.**

Boone County, Ky., Oct. 9th.

The oats ordered from you done fine; made an average of 125 bushels per acre. Please send me sample of your New Malakoff Winter Wheat and wheat catalogue. Very truly yours, **W. A. OSBORN.**

From the twenty-six acres of oats (fifty bushels of seed), we threshed 2,100 bushels, and every bushel will weigh out forty to forty-six pounds per bushel. I never saw anything like them in this country. **JOHN E. DIFFENBAUGH, Monroe Co., N. Y.**

Lyon County, Iowa, August 1st, 1913.

I have just harvested my crop from the New Alberta Seed Oats obtained from you last spring and have a most excellent crop. From present indications they will yield eighty to 100 bushels per acre, or about twice as much as ordinary home grown seed, side by side on same kind of ground under identical conditions. When threshed will write you again, giving exact results and comparison. Respectfully yours, **JOHN SCHMIDT.**

SAMUEL GLASGOW, Livingston Co., N. Y.

PAUL W. GOODSOE, Stratham, N. H.

Sauk County, Wis., Oct. 1st.

OATS

RATEKIN'S 100 BUSHEL OATS
SEND FOR SAMPLES.

Ratekin's Big Banner 100 Bushel Oats

I believe among all that is good "RATEKIN'S BIG BANNER 100 BUSHEL WHITE OATS" to be the best American oats grown, and next to our New ALBERTA Canada oats, and equal to any oats to be found in this country. They are big, plump and pretty. Grown side by side with common sorts they have frequently made a yield of 100 bushels per acre where common varieties made but twenty-five to forty 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 perfectly under wet weather conditions that caused other varieties to lodge and go down, there was **NONE LIKE THEM.**

We were the originators and introducers of this great oat and knew what they would do before we catalogued them four years ago. We had over 30,000 bushels of this seed last year and sent out over 10,000 samples promiscuously, indiscriminately, with our catalogues, and it was not sixty days until all was snapped up so quickly we hardly knew we had any, as nearly every sample we sent out brought back an order.

These oats are a sprangle head, large grain, thin hull, and are the best and most economical oats for feeding. They weigh out forty to fifty pounds to the measured bushel. Every farmer should try them this year. Order at least ten to twenty bushels, enough to get a start and some to sell to your neighbors for seed. Order early and you will have them when ready to sow.

PRICES: By freight or express at purchaser's expense, 1 bu. of 32 lbs., \$1.25; 2 bu., \$2.25; 10 bu. and over, \$1.00 per bu. Bags free, f. o. b. cars Shenandoah.

RATEKIN'S BIG BANNER 100 Bushel White Oats stand pre-eminently at the head of any other oats I have ever grown. From ten acres the past season I grew 960 bushels of the finest oats I ever saw, weighing out forty-seven pounds to the measured bushel.

L. W. ARMSTRONG, Cerro Gordo Co., Ia.

I want to tell you about my crop from the Big Banner Oats I got from you last spring. They were simply immense—never saw anything like them. Got 1,900 bushels from twenty acres. Sowed $2\frac{1}{2}$ bushels per acre and got a thousand bushels more than any of my neighbors got from the same amount of land.

JAMES P. HOLLAND, Saline County, Mo.

I am more than pleased with the success and results from your Big Banner Oats. I obtained ninety-four bushels per acre the past season—940 bushels off ten acres of ground, weighed measure. These oats, however, weigh out almost as heavy as lead. I am well pleased.

JACOB KERNS, McLean Co., Ill.

I have never seen or grown anything in the oats line so pleasing and satisfactory as your Big Banner White Oats. They are early, stand up well on the strongest, richest ground and outyield ordinary varieties more than two to one, and superior in quality as well as in every other respect. Made me yield of 111 bushels per acre the past season.

JOHN C. CLINGMAN, Fremont County, Colo.

Ratekin's New Kherson Oats

(Imported from Russia)

Without a blemish. Without a flaw. Most wonderful oats. John R. Lang, of Sherman County, Nebraska, raised 112 bushels per acre. John Sipple of Guthrie County, Iowa, says the Kherson produced double the yield of common oats on his place.

This new variety of oats was discovered by Prof. F. W. Taylor, the superintendent of the Agricultural Department of the great World's Fair of St. Louis, when he was traveling in the province of Kherson, Russia, in 1900. They were first imported into this country and grown at the Nebraska Agricultural Experimental Station, where they proved such a great success they sent out small lots to farmers all over the state and tests everywhere proved that these oats exceeded the highest expectations as to earliness, amount of yield and adaptability to withstand heavy winds and not lodge. The Kherson oats are about three weeks earlier to ripen than ordinary varieties. The plant is a vigorous grower, but not so tall as later varieties, hence not so liable to lodge. The leaves are broad, frequently three-fourths of an inch wide. They extend to the roots. The straw makes unusual good feed and is eaten greedily by stock. The heads have fine large sprangled full heads, which frequently have more than 100 seeds. A good idea is obtained from the accompanying illustration. We confidently advise our customers to sow liberally of these oats. The Kherson oats will always make you a sure, certain crop, whether the season is wet or dry. The demand for these oats has been almost unparalleled, and we have been unable to supply the demand for them in the past, but are abundantly supplied this year. They have stood the test on more than 50,000 farms in Nebraska, Iowa, Kansas and Missouri during the past four years, and despite unfavorable conditions have produced heavily everywhere. No sort has so thoroughly and completely shown its capability to withstand drouth as the Kherson. It is bug proof and rust proof. It's quick to get there. It's ready to cut, thresh and feed before ordinary sorts are ripe. It gives big yields. It's the last twenty to forty bushels per acre that makes farming profitable. If common oats yield thirty to forty bushels and the Kherson gives you sixty to ninety bushels the last thirty or forty bushels are profits.

COST: The price we are offering these oats at is ridiculously low, and every farmer who reads this catalogue can afford to try at least a part of his crop to these oats the coming season.

PRICE: 1 to 5 bu., 85c per bushel; 10 to 20 bu. and upward, 75c per bushel. Bags free on board cars here.

Ratekin's Seed House, Shenandoah, Iowa.

Gentlemen: The New Kherson Oats I got from you last spring are just what you claimed for them. "They are without a blemish. Without a flaw. The most wonderful oats this country has ever had." I threshed 1,270 bushels from ten acres. How is that? Tell the farmers everywhere to sow the Kherson Oats. There is none like them. The early dry weather done up other sorts here, and I will sell every bushel I have for seed. Yours truly,

JOHN SHUBERT.

Livingston County, Illinois.

The New Kherson Oats is all you recommend them to be—iron clad. My crop made seventy-six bushels per acre the past season and ripened two weeks ahead of earliest varieties in this vicinity.

SAMUEL S. SEMELROTH.

New Kherson Oats.

Among all the good varieties of oats don't overlook the Lincoln Oats. Like "Old Abe," they are never found wanting. They are early and an enormous yielder. These oats were first introduced fifteen years ago and have fully sustained them selves as one of the largest yielders. After visiting around and trying many of the new varieties farmers can safely turn back to them as one of the best standard sorts. It is not claimed for them that they have made 300 bushels' yield per acre. This is out of reason and the experience of all practical farmers, but they will run very closely around sixty to eighty bushels per acre under favorable conditions. We have the pure, genuine stock, and considering cleaning and grading we are offering them very cheap.

PRICE: Bushel, 90c; 2 bushels, \$1.75; 10 bushels and over, 75c per bushel. Bags free, f. o. b. here.

Ratekin's 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 as 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." Henry Wallace, editor of Wallace's Farmer, has stated: "I would rather risk growing grass seed with them than with any variety I know of."

PRICE: 1 bu., 90c per bu.; 2 bu., \$1.75; 10 bu. or over, 75c per bu. Bags free, f. o. b. here.

Ratekin's New Sensation Oats

THE EARLIEST TO MATURE AND THE LARGEST IN YIELD

We have been in the seed business many years, have spent the greater part of our life improving and importing new varieties of farm seeds and trying to help and better the condition of the farmer, and while we were conscious of the great merits of "Ratekin's New Sensation Oats" when we first introduced them eleven years ago but little did we think of the unbelievable yield of 210 bushels per acre from them, but did expect to realize and see them make a showing of 100 bushels per acre on ordinary oat ground, and then some. This expectation has been realized and duplicated over and over many hundreds of times by our customers who have planted and grown them, and we have reports of the enormous yield of 210 bushels.

Ratekin's New Sensation Oats

Are a white oat; kernels large and plump, strong, stiff coarse straw of more than medium height, always standing up well against the heaviest storms, maturing so early that rust and blight do not affect them; thin hull and often overrunning overweight 8 to 10 pounds. When you sow RATEKIN'S NEW SENSATION OATS you have an insurance policy against early drouth, rust or blight, and an early harvest and a big yield; also make you feel proud when we publish to the world that your New Sensation Oats gave you a yield of 100 to 200 bushels per acre.

Price: Bu., \$1.10; 10 bu. and over, \$1.00 per bu. Bags free.

Ratekin's Pure Genuine Canadian Grown Imported Regenerated Swedish Select Oats ONE OF THE GREATEST VARIETIES ON EARTH

Pure Regenerated Swedish Select Oats.

Pure, Genuine, Canadian Grown Imported Regenerated Swedish Select

Our Genuine Regenerated Swedish Select Oats is a heavy yielder, very early, heavy stiff straw, broad leaves, heavy grower, large white berry, thin husk—many stalks yielding as high as 200 kernels to the stalk. It is a tremendous yielder—always tops the market. On account of its stiff straw it does not easily lodge, but stands up better than other oats—a decided advantage, especially in the Corn Belt, where the land is rich.

Space will not begin to permit us to tell you here what we would like to tell you about this wonderful Regenerated Swedish Select Oats, and what it has done for hundreds in almost every state in the Union, many of whom thought they could not raise good oats at all because their ground was too rich, etc. You can raise good oats if you put them in right with the right kind of seed, and year in and year out there is no crop that is more sure or a bigger payer.

Our advice to every farmer is to try ten or twenty bushels or more of this seed. Many farmers who bought this seed claim if they had put their entire fields in with this seed at our price they would have been money ahead when they come to figure the net results at threshing time, and this is the only thing that counts.

PRICE FOR CANADA GROWN SWEDISH SELECT OATS, IMPORTED STOCK: Postpaid, 1 lb., 25c; 8 lbs., \$1.50. At purchaser's expense: 1 pk., 50c; ½ bu., 90c; 1 bu., \$1.60; 2 to 5 bu., \$1.50; 10 bu. and over, \$1.25 per bu. Bags free.

DESCRIPTION: —

Ratekin's Texas Red Rust Proof Oats

Red Rust-Proof Oats

This variety of oats was originated in Grayson County, Texas, and when we were visiting in that state a few years ago our attention was brought to these oats. Also one of the finest fields of oats we have ever seen. At the same time other oat crops on every side in that part of the country were completely destroyed by rust and blight, and were crinkled down and not worth cutting. We bought the entire product of the field, about 1,800 bushels, and shipped them to Iowa for seed. It was an experiment with us at that time, but we knew that with the great success they had attained under the hot, burning sun of that climate what they would do here in the North, and we were not disappointed in results and our best expectations. Since then we have grown them by hundreds of acres, and have sold and sent out thousands of bushels to all parts of this country, and everywhere they have proven a great success and an absolute sure cropper and an enormous yielder. Because of this and our introduction of them in the North they are now catalogued by a large number of the seed houses of the country. These oats are adapted to every locality in the Union where oats are or can be grown, and are especially adapted to all states and localities laying south of Iowa, Nebraska and southern Illinois, Indiana and Ohio, and do better than most other varieties, as they are of greater tenacity to resist hot weather and drouth than any other variety in existence. In the North they can be sown earlier than any other variety, as a light freeze or frost does not hurt or injure them as it does other sorts. In the South they are usually sown in the fall or winter, any time between the middle of October until time to sow spring oats, but fall and winter sowing is best.

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 Northern grown Texas Red Rust-Proof Oats sold and sent out for seed are more or less mixed with other varieties. With us, however, we have always been extremely careful in handling, threshing and garnering our seed crops, and our stock may be depended upon to be absolutely pure. As their name implies they are absolutely rust-proof; besides they ripen and are ready for harvest fully two weeks ahead of ordinary medium varieties, thus escaping storms and other unfavorable conditions. You can have them threshed and be feeding them before late varieties are ready to cut.

Since these oats have been acclimated and grown here in the North they have become much more hardy and vigorous than the same variety long grown in the South, and will give much better results in the South than the Southern grown.

DESCRIPTION: The Texas Red Rust-Proof 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, three and a half to four feet tall, have a sprangle head well filled with grains, often running 100 to 125 kernels to the head; also a splendid stooler. 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.

PRICE: 1 to 10 bu., \$1.00 per bu.; 10 bu. or over, 90c per bu.

Improved White Russian Oats

The original stock of White Russian Oats was a capital oat, and sprang immediately into great favor. It is quite distinct from most other varieties, being a side or horse mane oats. We now offer White Russian Oats grown in North Dakota in its old-time purity. White Russian is as nearly rust-proof as any oats can be. It is a good yielder and quite hardy. On account of its ability to withstand unfavorable weather will be found very satisfactory. Lb., 20c, by mail, postpaid; by express or freight, ¼ bu, 40c; bu, \$1.00; 10 bu. and over, 90c per bu. Bags free.

Oats

A change of oats is even more important than a change of seed potatoes, and it will pay you to renew your seed this year by sowing some of our improved varieties and thus increase your yield. Oats grown in the same soil and the same neighborhood year after year will deteriorate rapidly and soon become light and chaffy. Our prices being very low it would pay every farmer to buy new seed stock from us this year.

Speltz or Emmer

IT IS THE GREATEST GRAIN CROP GROWN: TEN THOUSAND POINTS IN ITS FAVOR AND NOT ONE BAD ONE. IT RESISTS DROUTH; IT THRIVES ON POOR LAND, ON STONY GROUND, IN FOREST REGIONS, ON THE PRAIRIES; IT MAKES A CROP WITH ALMOST ANY CONDITIONS OF SOIL AND CLIMATE; IT ENDURES A GREAT DEAL OF FROST; IT IS NOT READILY DAMAGED BY HARVEST RAINS; IT DOES NOT RUST, BLIGHT OR SMUT; YIELDS MORE THAN WHEAT, OATS OR BARLEY; MAKES BETTER FEED THAN BARLEY; RIPENS VERY EARLY.

What Is Speltz?

This question has been asked us a thousand times during the past ten years. **SPELTZ IS A CEREAL 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's the most profitable hay and grain food combined on earth. It will grow anywhere that any other grain crop will. It's the greatest drouth resister in the world, yet never affected by rains. It neither rusts, blights or lodges. It matures earlier than oats or spring wheat. It yields ten to twenty bushels more per acre than oats; it's 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; yes, and take a trip around the world if you want to.. It's the surest crop ever planted. It yields enormously. It's the richest food out. For fattening cattle and swine it can't be beat.

Culture of Speltz

is simplicity itself. It's sown in the spring in the North; in the fall, 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 eighty pounds 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 you once sow it.

We have made our prices lower than ever before; we want every farmer who receives this catalogue to try ten or twenty bushels; the more the better pleased you will be.

PRICE: 1 bu. (40 lbs.), \$1.35; 10 bu. or more, \$1.25 per bu. Bags free.

Ratekin's Giant White Hulless Barley

Some of its valuable properties: It's hulless; it is beardless; it yields good crops on poor land and enormous crops on strong ground; weighs sixty to sixty-four pounds to the measured bushel; it is of inestimable value to everyone who feeds stock of any kind. It ripens very early; it makes better pork than corn. It's sure a very profitable crop for every farmer to grow.

White Hulless

No beards or hulls. The grain looks like wheat. Equal to wheat in feeding value, and will yield twice as much. No barley of which we have knowledge has proved as valuable to the stock raiser as the Improved White Hulless. It is not a malting variety, but for feeding purposes there is no barley raised which can compare with it in earliness, yield and quality.

The grain is exceedingly heavy, weighing from sixty to sixty-three pounds to the measured bushel. The yield varies according to soil and climatic conditions, but it can be depended upon to produce from fifty to eighty 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 the two together 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.

It is often grown for hay, coming very early and providing rich feed. It should be cut just when in the milk for hay and while the straw is green. In this condition it is relished by all kinds of stock. The straw is stiff and straight and seldom if ever does it lodge.

There is positively nothing in the world that will give to your cattle better health and add to their weight quicker than the feeding of Giant White Hulless Barley. Indeed, feeding them twice daily on Giant White Hulless 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, by mail, 1 lb., 25c; 3 lbs., 60c; 7 lbs., \$1.00. By freight or express, at purchaser's expense: Peck (12 lbs.), 75c; ½ bu., \$1.25; 1 bu. (48 lbs.), \$2.25; 2 bu., \$4.25; 5 bu. and over, \$2.00 per bushel. Bags included, f. o. b. cars here.

Manshury Barley

This grand barley was introduced from Asia by the Ontario Agricultural College several years ago, and is, beyond doubt, one of the most valuable varieties ever introduced into this country, greatly out-yielding the renowned Manshury Barley. It is an early six-rowed variety, maturing in eighty to ninety 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 heads of plump grain, which possess 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 for 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. 1 lb., 25c; 3 lbs., 65c, postpaid; pk., 45c; bu. (48 lbs.), \$1.50; 10 bu., \$14.50.

Ratekin's 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 eighty to ninety 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 hulless barley which is described above on this page, and which is grown for feeding purposes only. Ever since this grand 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. Peck, 50c; bu., (48 lbs.), \$1.60; 2½ bu., \$3.75; 5 bu. and more, \$1.45 per bushel, sacks included.

Ratekin's White Hulless Barley

A GREAT MONEY MAKER FOR THE FARMER.
THE HEAVIEST CROPPER KNOWN.
THE EARLIEST, STRONGEST STRAWED AND
PLUMPEST BERRIED SORT KNOWN.
THE GRANDEST AND BEST YIELDING BARLEY
EVER INTRODUCED IN THE UNITED STATES.

A CHANGE OF SEED TO THIS VARIETY WILL
MORE THAN DOUBLE YOUR FEEDING CROPS.
IT CAME OUT ON TOP IN A COMPARATIVE
TEST OF THIRTY-SEVEN VARIETIES.

Manshury Barley.

Oderbrucker Barley, (Wis., No. 55)

A Grand 6 Rowed Barley

Oderbrucker Barley

There is more barley produced in the State of Wisconsin than in any other locality. The reason for this is quite 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 Experimental Station of Wisconsin has given particular attention to the breeding of barley to obtain big yields; protein content and other qualities which are essential for both brewing and feeding purposes. Oderbrucker 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 the Manshury, yielding five to ten bushels more per acre. The original stock of this barley was obtained in Germany by the Ontario Agricultural College, from which place the Wisconsin Experimental Station procured a small supply. By them it was greatly improved and then disseminated. Oderbrucker is a stiff-strawed, heavy-yielding six-rowed bearded variety. It is about the same as Manshury in time of maturity, manner of growth and general appearance, but has a plumper kernel and weighs more to the measured bushel. Prof. Moore says: "In stiffness of straw and rust resistance it is superior to any other variety on test."

It has protein content of 15 per cent, or nearly double the amount of protein found in many other varieties. This makes it a very valuable feeding barley, which is an important consideration with the leading farmers and stockmen, who are now appreciating more and 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 maiting barleys.

OUR SEED BARLEY, of all varieties, was **GROWN FROM SPECIALLY SELECTED STOCK** and can be depended upon to be of pure varieties and of the highest and best grade obtainable anywhere; is also well cleaned, plump and of fine bright color.

PRICE: Lb., postpaid, 20c. By freight or express, purchaser's expense: Peck, 50c; ½ bu., 90c; 1 bu., \$1.60; 5 to 10 bu. and over, \$1.50 per bu. Bags free, f. o. b. Shenandoah.

Change Your Seed Wheat

Spring Wheat Pedigreed Stock.

PRICES: We are obliged to ask an advance over the market price for our High Grade Seed Wheat. There is very much larger cost attached to its production and preparation than anyone who has not had the experience could possibly appreciate. Space does not permit of going into detail, but, as a matter of fact, the prices named below for the larger quantities represent but a slight advance over the actual cash outlay to us. We believe that farmers who want to change their seed will find it very much to their advantage to secure enough, at least, to give them a start.

Sow Only Pure-Bred Varieties

All reliable authorities agree that pure well 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 five to fifteen 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.

Iowa Chief

This variety of spring wheat has been selected and bred by us and our seed stock grown under our own personal supervision until it has attained such a high standard and quality that we feel justly entitled to give it a distinct name and brand. All who have seen this wheat, both the grain and the crops while growing, compliment us on its superior quality and yield, also fine appearance. 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 in the world, as well as the most pounds to the bushel. In addition to this it is adapted to any place or locality where spring wheat can be successfully grown.

PRICE: Lb., mail postpaid, 20c; 3 lbs., 50c. By express or freight, purchaser's expense: Peck, 50c; bu., \$1.75; 5 bu. and over, \$1.60 per bu. Bags free, f. o. b. Shenandoah.

Ratekin's Big Red Fife Spring Wheat

This is the wheat used in the Orange Judd Farmer contest of 1906, 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 the finest stock of milling wheat in existence.

PRICE: 1 bu., \$1.60; 5 to 10 bu. or over, \$1.50 per bu.

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 the 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: By freight or express, at purchaser's expense: 1 bu., \$1.60; 5 to 10 bu., \$1.50 per bu. Bags free.

Macaroni Spring Wheat

Grand Macaroni Wheat! Noble Macaroni Wheat! The only wheat that defies rust, that fearful scourge. Marvelous Wheat, Macaroni! The wonderful wheat defying all climates and climatic conditions, disease, insects and rust; yes, everything, a yield bordering on the marvelous! Macaroni, or Durum Wheat; a Great Drought Resister; Rust Proof. Sent out by the United States Department of Agriculture, under strong recommendation as to its great value for semi-arid land 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 per cent greater than any other variety of wheat. Many farmers report enormous yields. One writes, "I obtained sixty-two bushels to the acre, another seventy-one, another fifty-two, another forty-eight and another forty-nine." It is always a sure cropper anywhere and everywhere and will mature in a shorter period than 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 may be sown in Oklahoma, Texas and that latitude in the fall; in the North it should be sown just as early in the spring as conditions will permit. It requires one and one-half bushels to the acre.

PRICE: Lb., by mail, 25c; 3 lbs., 60c. By express or freight, expense of purchaser: Peck, 50c; ½ bu., 90c; 1 bu., \$1.60; 3 bu., \$1.55 per bu.; 10 bu. and over, \$1.50 per bu. Bags free.

Iowa Chief Spring Wheat.

Winter Seed Wheat

Prize Winner, Malakoff, Karakoff and Turkey Red.

THE ONLY VARIETIES OF HARD WHEAT TO SOW.
IN SOFT BEARDESS VARIETIES NOTHING EQUALS

RATEKIN'S HARDY NORTHERN GROWN FULTZ.

SOW ONLY PURE-BRED VARIETIES.

WHAT A FEW OF THE BEST AUTHORITIES SAY:

H. M. COTTRELL, Agricultural Commissioner, says: "Well bred seed wheat is hardier and will stand greater extremes of drouth, cold and flood than mongrel wheat. Where wheats are mixed and grown together the mongrel or bastard strain predominates, and flour made from such wheat the world over lacks strength." "Heavy seed wheat has given increased yields per acre over light seed at all experimental stations." "Plump heavy seed produce strong vigorous plants, and the more unfavorable the conditions the better the odds in favor of the well graded heavy seed."

The loss of money from sowing mixed and mongrel wheat affects every man, woman and child in every state, whether they live on farms or in town.

Every farmer, every business man, the newspapers of every wheat growing state, farmer's institutes, banks, commercial clubs, millers and grain shippers should join in the movement to get every bushel of wheat sown this year **PURE BRED AND SEEDED IN PROPERLY PREPARED GROUND.** If everyone will take hold at once, it will add millions of dollars to the value of the wheat crop.

Prof. Harvey says: "We use the best seed we can find and fan and grade it thoroughly, so each grain will grow a strong stalk."

Prof. Kruger says: "I use and grow the Kharkof only. Since up-to-date it is the greatest drouth resisting variety known. For the past five years I have raised forty-five, forty-four thirty, forty and forty bushels per acre on same kind of land some of my neighbors get but fifteen to twenty bushels per acre from and when they do I have forty and forty-five bushels per acre."

(Note—Mr. Kruger lives in Ellis County, Kansas. The average yield of wheat in Ellis County is about ten bushels per acre).

A Photograph of an 80-acre field of Ratekin's Malakoff, which made 62 bu. to the acre, grown in 1912 by John McLaren, Fremont County, Iowa.

Iowa State College Experiment Station, Ames, Ia.
Gentlemen: Have just finished compiling data of winter wheat. We find the New Malakoff furnished by you came first in yield among ten varieties grown here. Sowed $1\frac{1}{2}$ bushels to acre, good stand; 93 per cent plants came through the winter strong and vigorous.

L. S. KLINCK.

Illinois Agricultural Experimental Station,
Urbana, Illinois.

Yours of the 12th inst. at hand. The Malakoff among the best varieties and largest yielders on our plots this year.

ALBERT N. HUME.

Gasconade County, Mo.,
Please send me copy of your descriptive price list on winter seed wheat. The seed wheat I got from you two years ago made the best crop of wheat I have ever grown. It made Seventy Bushels to the Acre. If any of your customers have grown a larger yield than this, please let me know who, when and where. Send me samples of any new importations you have made, as I wish to place an order with you at once. Respectfully, AUGUST F. HOCH, Jr.

Nebraska Agricultural Station, Lincoln, Neb.

Replying to yours of recent date, would say the Malakoff gave excellent satisfaction. As regard yields, one the best of four or five varieties tested.

T. L. LYEN.

RATEKIN'S NEW GRAND PRIZE WINNER: Famous, Marvel, Grand New Variety of Winter Wheat; imported from Russia in 1909.

RATEKIN'S NEW MALAKOFF. Imported by the RATEKIN'S SEED HOUSE, from Russia, in 1902 and harvested our first crop in 1904. In 1907 it made the enormous yield of sixty-two bushels per acre, and the following year from twenty acres of measured ground it threshed out 1,192 bushels, or an average yield of over $59\frac{1}{2}$ bushels per acre, proving the highest yielding hard wheat ever grown in this country.

RATEKIN'S NEW PRIZE WINNER MALAKOFF, KHARKOF and TURKISH RED stand first and at the head of all hard varieties. All are extremely hardy, and will resist more unfavorable conditions than any varieties in existence. They will do well anywhere rye will succeed.

Mammoth Wonder White Rye

Mammoth Wonder White Rye

We consider winter rye one of the most important of all farm crops. In the first place it is a sure crop, failures being almost unknown. Every farmer should have at least a few acres of it. It is usually sown in the fall, and as it grows very vigorously will furnish pasture till late in the fall, and also early in the spring before other 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. We are sure it will please you, no matter whether you want it for pasture or grain crop. As grown for the grain alone it will yield great returns and make money for you. As much as sixty bushels per acre have been procured.

PRICE: Peck, 50c; bu., \$1.40; 2 bu. or more, \$1.35 per bu; 10 bu. or more, \$1.25 per bu.

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 growing with each season. Spring Rye would be ashamed of itself to yield less than forty bushels per acre—and at that yield ten acres will pay you handsomely."

This magnificent rye is of recent introduction, and it has proven to many of our farmer customers a sure money-maker a big money-maker, and an easy money-maker, as good Spring Rye brought almost as good a price as wheat and yielded from ten to thirty bushels per acre more. The price is seldom below 75 cents per bushel, while the yield rarely falls below forty bushels per acre. We have but a few thousand bushels of this Rye, and we request all our farmer 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 when Spring Wheat is sown, at the rate of about 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 also 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.

Spring Rye is more productive than any Winter Rye and the grain is of finer quality.

PRICE OF OUR MAMMOTH SPRING RYE: Packet, 5c; lb., 25c; 3 lbs., 60c, postpaid. By freight, peck, 60c; bu., \$1.75; 2 bu. or more at \$1.65; 10 bu. or more at \$1.60 per bu.

Forage and Fodder Plants

Dwarf Essex Rape

THE MOST PROFITABLE PASTURE PLANT IN EXISTENCE.

Come here, Mr. Farmer, until we tell you about Dwarf Essex Rape. One acre of Dwarf Essex Rape will pasture more hogs, cattle and sheep than six of clover or grass. As a healthy fattening pasture food it has no equal. It stands without a rival in point of cheapness and effectiveness.

It is an annual, bearing a close resemblance in leaf and stalk to the ruta бага, 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 twelve 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 ten to twenty head of sheep for two months, and in that time it will fatten them in good form for market.

Uses: 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 five pounds of seed an acre, to provide pasture for sheep after harvest. 4. Along with peas, oats, clover seed, to provide pasture and to get a "catch" of clover. 5. As a cover in the orchard for winter protection to avoid root killing. 6. In corn, sowing the seed with the last cultivation; the succulent feed produced may save the loss of cattle by corn stalk disease. Prevention is better than medicine in treating this fatal disease. 7. Along with rye, sown in August, in sheep pasture. 8. On early plowed fields to shade the land and so that the soil will not leach, wash or drift. 9. To plow under as a green crop, adding humus to the soil, an element needed in grain growing sections. When rape is sown broadcast five pounds of seed an acre will suffice. When sown in rows, say thirty inches apart, and cultivated, two pounds an acre will be enough. Hundreds of farmers have written us asking methods of rape culture. Why, it's the simplest crop grown in the world. You can sow it anywhere and everywhere, and at all times after danger of frost is past until September 1st, later in the South. We have hundreds of customers who sow fifty to 500 pounds each year. Rape is adapted as a catch crop and may be sown in the early spring to provide summer pasture for stock. Plow the ground same as for turnips and sow five pounds per acre broadcast, or can be sown in corn and plowed in last plowing. Then after you have cut small grain sow in stubble, running disc over the ground to give light covering. There is nothing so easily and profitably grown, and practically at no cost. Sow rape; it will please and profit you. Our seed is pure Dwarf Essex, imported direct from Essex, England, new crop grown.

PRICE: 1 lb., by mail, postpaid, 25c; 5 lbs. (will sow an acre), \$1.00. By freight or express at purchaser's expense: 10 lbs., \$1.00; 25 lbs., \$2.25; 50 lbs., \$4.25; 100 lbs., \$8.00. Bags free.

PENCILARIA

A Word About Our Rape Seed

Some firms ask less money for their Rape Seed than we do. We pay a premium for our imported seed in order to get the purest, cleanest and best, and it has always given the greatest satisfaction. A saving of a cent or two a pound means from 3 to 10 cents an acre. We do not feel that for this difference between the price of known and unknown seed, seed that is proven good, and seed that may or may not be good, that we are justified in taking this risk or expecting our customers to do so.

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 two or three feet it can be mowed from four to six times, according to the latitude. If allowed to grow twelve or eighteen 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 six inches apart in the row and the rows about three and one-half 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 forty rich, juicy, leafy stalks to the plant. Sow as early as you would Indian Corn. The usual way of growing it, however, is to sow same when three to six feet high, and it will immediately start again and can be mowed four to six times during the season. Every farmer, everyone who keeps cows, horses and hogs, should try it. Sow in drills five to six pounds, or broadcast, eight pounds per acre.

PRICE: Pkg., 5c; 1 lb., 25c, postpaid. By express: 1 lb., 15c; 10 lbs., \$1.30; 50 lbs., \$6.00.

Forage and Fodder Plants

Ratekin's 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 yield 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 the forage crops grown. It yields here a much greater amount per acre than either corn or any sorghum variety. It is a remarkably vigorous grower, reaching twelve to eighteen feet in height, with an unusually abundant supply of leaves and tender stems. Quite often a single kernel will produce as much as sixty to one hundred stalks. If cut when it reaches four to five 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 plant ing 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 of an acre.

PRICE: Package, 10c; oz., 15c; ¼ lb., 40c, ½ lb., 75c; lb., \$1.25; 2 lbs., enough for one acre, \$2.25; 10 lbs., \$10.00, postpaid.

"The Teosinte is excellent. It grew from ten to twelve feet high and from forty to fifty stalks for one kernel of seed."

BARBARA FRYE.

Joe A. Noble, Caddo, Ky., says: "Am well pleased with Teosinte as a fodder plant. I grew from one kernel of seed 113 stalks fourteen feet high. That is immense."

Montgomery County, Mo.

Teosinte is a great fodder plant, and am wonderfully pleased with it. Forty tons of magnificent fodder to the acre is my yield.

J. ROPPEL.

Coesfield, Texas.

Teosinte is simply immense. It did not seem to care whether the drouth struck it or not and kept right on growing. It did not have any rain for ten weeks, but the 26th day of August we had a good rain. Now, you think it is not growing, but it is. One stalk of it grew eleven inches in thirty-six hours. On one plant raised from one kernel of seed I got sixty-four strong, bushy stalks.

JOHN URHIN.

NOTE: The sorghums all have better drouth resisting qualities than Indian corn. The varieties are many, and may be classed as saccharine and non-saccharine (sweet and non-sweet). The first group includes sugar cane, etc.; the second group, Milo Maize, Jerusalem Corn, Kafir Corn, etc. Within recent years dairymen have widely recognized the high economical value of thickly sown sorghum as a summer food for milch cows.

Early Amber Cane.

Early Amber Cane is the most used. Notwithstanding its great adaptability as a food for live stock it is only recently that the real value of sorghum (or sugar cane), has attracted general attention. Its great merit is now beginning to be appreciated. It is sweet, tender, nutritious and greedily eaten by cattle, horses and hogs. Dairymen find that cows give more and richer milk from its use and it is claimed that as high as twenty tons of fodder have been grown per acre. It can be grown successfully in any part of the country from Canada to Texas, and from the Atlantic to the Pacific. It is one of the best plants to withstand drouth, and is therefore a sure crop. It is usually put in during the first half of June, sowing 100 pounds per acre, broadcast, or sixty to seventy-five pounds per acre if sown with a wheat drill. Cut just before frost with a mower and cure like hay, or with a binder and stand the bundles up. If wanted for sorghum purposes we recommend the Kenney, which is purer, but the cheaper grade is about as desirable for fodder purposes. Price is subject to market changes, but it usually advances later in the season.

Packet, 10c; lb., 25c; 3 lbs., 65c, postpaid. By express or freight, not prepaid, pk., 60c; bu., \$2.00.

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 eight or ten feet. Some stalks develop twenty 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.

Packet, 10c; lb., 25c; 3 lbs., 65c, postpaid. By express or freight, not prepaid, pk., 85c; bu., \$3.00.

Jerusalem Corn

This non-saccharine sorghum is one of the best and surest grain crops for dry countries and seasons. It grows about three 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 three pounds of seed per acre.

Kafir Corn.

Packet, 10c; lb., 25c; 3 lbs., 65c, postpaid. By express or freight, not prepaid, pk., \$1.40; bu., \$3.50.

Kafir Corn

This is a most excellent fodder plant. It grows from six to eight feet 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 sixty bushels to the acre. There is no failure about it, 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 five pounds of seed per acre. For fodder sow one-half to one bushel, either broadcast or in drills.

Packet, 5c; lb., 20c; 3 lbs., 50c. By freight, pk., 60c; bu., \$2.00; 2 bu. or more at \$1.75.

Teosinte.

Milo Maize.

Jerusalem Corn.

Ratekin's Panicum Crusgalli

The Great Oriental Grass Yields 10 to 15 Tons of Fodder to the Acre

Panicum Crusgalli.

grown in favor wherever tried. It belongs to the pea family, but the vines are much longer and the foliage is more abundant. It may be sown either in the spring or fall with about half a bushel of rye or oats for support. It grows rapidly and is particularly valuable in sections where clover does not thrive. In the North it remains green all winter under the snow, and it is invaluable for early pasturing or soiling. The Department of Agriculture estimates the value of an acre of vetch plowed under equal to commercial fertilizer at the rate of from \$16 to \$40 an acre. When sown in August or September it covers the ground before frost and prevents leaching of the soil during the winter and spring. When sown in April or May it can be cut in July, the second growth affording excellent pasture during the summer. The yield of green fodder is from twelve to twenty tons an acre. When raised for hay it should be left standing until some seeds have become well formed. Sow forty-five to sixty pounds of vetch and with it half a bushel of rye to the acre. Large pkt., 5c; lb., 25c, postpaid. By freight, lb., 18c; 10 lbs., \$1.60; 100 lbs., \$15.00. Bags free.

A WORD ABOUT PRICES ON Millets and Vetch: Prices named for them are the prevailing prices at time this catalogue goes to press, January 1st, but are subject to fluctuating market prices. Our prices are always in line with any other reliable seed house, and it would be well to write for firm prices before ordering in large quantities.

Mammoth Russian Sunflower

Sunflower seed is one of the best egg producing foods for poultry. It can be sown any time before the middle of July. Plant in hills three and one-half to four feet apart each way, or in drills. Seeds are the best of food for poultry, and is much cheaper to raise than corn.

Only those who have tried it realize what an important crop the sunflower proves to the poultry and hog raiser. The poultry man well knows the egg producing properties of sunflower seed. It is also very fattening and contains a very high percentage of protein. Sow the seed in rows far enough apart to admit of cultivation. Two to three pounds will plant an acre. The plants will grow from six to ten feet 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. Large pkt., 5c; 1/4 lb., 10c; lb., 25c, postpaid. By express or freight, lb., 15c; 5 lbs., 60c; 10 lbs., \$1.00.

Artichoke Roots

THE NEW LARGE JERUSALEM VARIETY, producing from 300 to 600 bushels per acre. An excellent food for cattle, sheep and milch cows; they are for the production of milk equal if not superior to bran. But their greatest value is food for hogs. Even the labor of feeding is avoided, as the hogs will help themselves if allowed to do so. We consider them the cheapest and healthiest hog food possible to raise, and find that where brood sows have free access to artichokes they and their pigs invariably do well. Hogs will not only grow, but fatten on them.

PLANTING, CULTURE, PRICES, ETC.: Artichokes need planting but once and little or no culture after the first year. Cut as potatoes, only smaller; plant in rows three and one-half feet apart. Plow deep, plant shallow, say two inches; the second year break up the ground as for corn; will come up thick all over the surface.

PRICE: 1 lb., 30c; 4 lbs., \$1.00, by mail, postpaid. By freight or express: 1 bu., \$1.60; 5 bu. and over, \$1.50 per bu. (Three bushels sufficient for one acre.)

Make the Land Produce

EVERY POUND OF FEED PER ACRE THAT YOU CAN. Every plant that will conserve other crops raised on a farm is of material advantage to the farmer. In this department will be found a number of items which, if properly used, will solve the problem of feed for the live stock when corn, hay and pasturage are short from any cause. Amber cane or Kafir corn for fodder; rape or kale for pasturage; vetch or field peas for hay can be used by any farmer in the corn belt with profit. All may be siloed with corn to advantage.

Winter Sand Vetch.

Beets and Mangel Wurzels are Corn Savers

We cannot too strongly urge upon every farmer to plant an acre or two of Mangel Wurzel, also carrots, parsnips and rutabagas as a change, a fattening and health-giving food for cattle, sheep and swine. Nothing in the wide world will pay you handsomer dividends in the healthfulness of your stock than these root crops and no root is a better paying investment for farmers than **MANGEL WURZEL**. On good land, well cultivated, a yield of forty to fifty tons per acre is not uncommon. Forty tons of Mangels hold as much nutritive matter as 130 bushels of corn, but are more eagerly eaten by all stock and are more digestible. There is no root crop grown, if any other crop of any sort, so profitable for stock feeding purposes as Mangel Beets, and they are so easy to raise we can't understand why every farmer who raises hogs, or keeps milch cows, do not grow them more extensively. They yield all the way from twenty to sixty tons per acre and are the most healthy diet for hogs during the winter when they are deprived of clover and grass, and are equally good and valuable for milch cows and other cattle. Two bushels of beets with one bushel of corn will go further, make more growth and fat or milk than three bushels of corn, and will besides keep your hogs and other stock in healthy, thriving condition. They usually grow to an average weight of twenty to forty pounds each, and I have had reports of where they attained as high as ninety to 100 pounds. I will tell you how to plant these **CORN SAVERS THAT MAKE HOGS HEALTHY AND FAT**. Plant from first of April to last of June, in rows eighteen inches apart. It requires five pounds of seed to plant an acre. After they are well started, thin out until the plants stand about six inches apart in the row. If too thin in spots they will bear transplanting. Pull them and store them in a cellar or in the ground where they will not freeze and mix some pulverized soil with them and a little over them and they will keep in good condition for feeding until grass comes in the spring. **MAMMOTH LONG RED WURZELS**, called by some seedsmen Jumbo Mangels.

PRICES: Postpaid, by mail or express prepaid, lb., 45c; 5 lbs. (enough for one acre of ground), \$2.40. By freight or express, your expense, 5 lbs., \$2.00.

Golden Tankard

Best for dairy farming. Considered indispensable among English dairy farmers. This is of a rich, deep yellow through. Early, hardy and a heavy cropper, on account of its shape the roots can be left standing close in rows.

PRICES: Per oz., 5c; ¼ lb., 25c; lb., 45c; 5 lbs., \$2.00. 5 lbs., your expense, \$1.50.

Champion Yellow Globe

Finest type of yellow globe in cultivation. Roots immense size, fine shape, small tap root, neat top. Flesh being very firm and fine grained, renders it an excellent keeping variety. Well adapted to shallow soils and has a record of producing **106 TONS PER ACRE**. This immense crop was grown by sowing seed in drills fourteen inches apart and thinning to ten inches in the row. Our seed of this variety is particularly choice.

PRICES: Per oz., 5c; ¼ lb., 25c; lb., 60c; 5 lbs., \$2.00. 5 lbs., your expense, \$1.50.

Danish Sugar Beet

An improved strain of the White French Red Top Sugar Beet, which is wonderfully fine for feeding to milch cows, and will add greatly to the milk production as well as to its richness. It will yield as much as most varieties of mangels, and we consider it of superior feeding value.

PRICES: Oz., 15c; ¼ lb., 25c; lb., 65c. By express, 5 lbs., 50c per lb.

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 cattle and hogs relish them.

PRICES: Per oz., 5c; ¼ lb., 20c; lb., 50c; 5 lbs., \$2.00.

Klein-Wanzleben

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

PRICES: Per oz., 5c; ¼ lb., 20c; lb., 60c. By express, 5 lbs., \$1.50.

The Mastodon Stock Carrot

Glory enough! There may be difference of opinion regarding many varieties of seeds, but there is no room for difference of opinion as to which is the best—pre-eminently best—stock carrot. The Mastodon IS THE ONE TO PLANT. It yields more tons and of greater nutritious qualities than any carrot that grows. Roots often measure fifteen to twenty inches long and twenty inches in circumference, yielding from sixteen to forty tons per acre. This is no extravagant statement. Plant same as stock beets.

PRICES: Oz., 10c; ¼ lb., 25c; lb., 80c, mail postpaid. By express or freight, lb., 75c.

Victoria

The Victoria is a very large and a very rich stock carrot. There can be only one best stock carrot, and we think our Mastodon is that carrot, yet there are many who prefer a yellow carrot. We can say to such that there is no yellow carrot which can approach the Victoria in size, in yield and in feeding qualities. It is the largest and best form of 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.

PRICES: Large pkt., 15c; ¼ lb., 25c; lb., 80c, by mail postpaid.

Golden Tankard.

Cow Peas

Whip-Poor-Will Cow Peas.

Cow Peas have long been grown in the South as forage crops and soil improvers. The result has been that the Northern farmers have been attracted to the crop, and the culture has been greatly extended as varieties have been introduced that ripen anywhere in the North. They will thrive where clover will not grow. They must not be sown till the soil is warm. Where wheat follows the oat crop, peas can be sown after oats are harvested and will make a growth to turn under for wheat that will immensely improve the crop. The early 70-day sorts are best for this purpose; the running varieties for earlier sowing are best for hay. The crop of hay even on land of only moderate fertility will be more than two tons per acre, and on good land very much more.

New Era The earliest variety of Cow Peas in existence and therefore decidedly the best for growing in Northern States. Throughout the South Cow Peas are considered one of the most profitable crops, as they yield immensely and are largely used as green summer feed, also for planting in corn and other crops and plowing under as a fertilizer. Particularly recommended for planting after grain harvest and plowing under in fall. If you will get the grain off the ground early and plow and plant to New Era Cow Peas you can put the ground in fine shape for next year's crop. You will not have to haul manure on land so treated. Sow in orchards and either use for feed or soiling. Every farmer can use them profitably, as the New Eras mature in sixty days and have done well as far north as Minnesota. Packet, 5c; lb., 30c; 3 lbs., 80c, postpaid. By freight, pk., \$1.25; bu., \$3.75.

Whip-Poor-Will The most highly valued plant in the South for fodder and reclaiming old and worn out land, as it is a leguminous plant of special merit as a fertilizer. The vines when fed green make the best fodder and are very nourishing. The Whip-Poor-Will is the most popular sort, and yields a good crop of both fodder and peas. When ripened ground peas make the best cattle fattener. Packet, 5c; lb., 25c; 3 lbs., 60c. By freight, pk., \$1.10; bu., \$3.50; 2 bu. or more at \$3.25.

Field Peas For Northern states there is no crop of greater value than Field Peas, and none is more neglected, which can only be attributed to a lack of knowledge as to their merits as a fodder, being very rich in the elements that improve the muscle, bone and nervous system. Sow only when the ground can be worked, using two bushels of peas and two bushels of oats per acre. Cut when the oats are in the milk and cure for hay. Especially valuable to the farmer who has not enough meadow land.

White Canada Peas More used than any other. Is one of the very best soiling crops at the North. It is sometimes grown alone, but the most satisfactory dairy results come from sowing it with oats, rye or barley. It makes good ensilage, and is an admirable food either green or dry for cattle, being highly nutritious and rich in milk-producing elements. It is quite hardy and may be sown early in the spring, and will be ready to cut in May or June. The seed should be sown at the rate of one to one and a half bushels per acre. Packet, 10c; pt., 20c; qt., 35c, postpaid. By express or freight, not prepaid, qt., 20c; pk., 85c; bu., \$3.00; 2 bu., \$5.50.

Soja Beans The berries ripen in about three months from the time of planting and produce a crop of twenty to forty bushels to the acre, and are as easily grown as other beans. When roasted and ground it closely resembles coffee and tastes quite similar. Some mix half and half with coffee when using and claim it is superior. Its great value to the farmer lies in the fact that when ground it makes one of the most valuable crops for feeding stock and adds greatly to the milk production. This variety will ripen in all the Northern states; grows over four feet high, heavily podded with seed and yields ten tons per acre. It is a valuable fodder variety either for feeding green or for the silo. Being a rich, nitrogenous feed, it is unsurpassed as a flesh former, and like the clovers, is a soil improver. Plant in drills two or three feet apart and one foot between plants. Packet, 5c; lb., 30c; 3 lbs., 75c, postpaid. By freight, pk., \$1.00; bu. (50 lbs.), \$3.50.

The Clay This is so called from the color of the seed, which is the color of reddish yellow clay. The plant is of the same season and habit of growth as the Black, and like the Black, has ripened as far north as southern Minnesota. Many growers in the South prefer it to the large Black because of the fineness of the growth, which makes it easier to cure. Packet, 10c; pt., 25c; qt., 40c, postpaid. By express or freight, not prepaid, qt., 25c; pk., \$1.00; bu., \$3.50.

Improved Navy or Boston Beans A wonderful improvement over the old-time Navy Bean and superior to the Michigan pea bean. Makes a very desirable farm crop, especially in the far North. Packet, By freight, pk., \$1.00; bu., \$3.75; 2 bu. or more at \$3.50.

5c; ½ pt., 12c; qt., 35c, postpaid.

PRICES OF PEAS SUBJECT TO MARKET CHANGES. Prices are so fluctuating that during the season there may be a wide variation in price and we may be entirely out of line with current prices at time ordered, but we will give you closest prices and quotations at any time upon request.

Buckwheat **JAPANESE BUCKWHEAT.** 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 drouth and blight very well. The seed is rich dark brown in color and larger than Silver Hull. As much as forty bushels to the acre has been harvested of this variety, making it very profitable to raise. ¼ bu., 50c; bu., \$1.45; 2 bu., at \$1.35; 10 bu. at \$1.25. Bags free.

SILVER HULL BUCKWHEAT. This valuable variety originated abroad and 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 a 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 forty to fifty bushels an acre. ¼ bu., 50c; bu., \$1.40; 2 bu. at \$1.35; 10 bu. at \$1.25. Bags free.

Broom Corn **IMPROVED EVERGREEN.** For length, strength and straightness of brush this variety is unexcelled. It is of light green color without the slightest reddish tings. It makes far the best brooms of any grown. Height seven to eight and nine feet.

PRICE: By mail, postpaid, lb., 30c. By freight, pk., 60c; ½ bu., \$1.10; 1 bu., \$1.75.

DWARF EVERGREEN. This is a popular variety on account of its being not so liable to blow down and lodge as the taller varieties. Heads are very brushy and make a fine yield.

PRICE: By mail, postpaid, lb., 30c. By freight, peck, 60c; ½ bu., \$1.10; 1 bu., \$1.75. Ask for prices on quantity.

Seed Flax It will pay you to sow nice, pure, high-grade flax seed. Our seed is thoroughly re-cleaned, free from mustard or any weed seed, and is as good as can be purchased anywhere. Price subject to change. Per lb., 20c; 3 lbs., 50c, postpaid. By freight or express, not prepaid, pk., 65c; bu., \$3.25; 2 bu. or more at \$3.10; 10 bu. or more at \$3.00 per bu.

New Crop, Recleaned, Tested Grass Seeds

Ratekin's Iowa Chief Brand Grass and Clover Seed

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 named are the ruling prices at time this catalogue goes to press.

We pride ourselves there is no other house in America that takes such extraordinary care in cleaning and placing on the market a more superior grade of grass seed than our house does. **WE CALL SPECIAL ATTENTION TO ABOVE PARAGRAPH** by reason of the many perplexities we have encountered in our experience 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, quality and grade of seeds considered.

We are here in the famous "BLUE GRASS DISTRICT" of Iowa, where there is a large surplus supply of all the best grasses and clovers grown, and are always in position to obtain the most choice seed, the very **BEST** there is to offer. In fact, we possess many advantages over the city seed houses, as we are so situated that we can always have choice of the best that is grown, while the lower grades are shipped away to other seed markets. For these reasons we can always sell a better grade of seeds and sell them at lower prices than other seed houses not so situated. By reason of the advantages named we have for many years handled grasses and clovers extensively, and have made this branch of our business one of our specialties. **WE HANDLE BUT ONE GRADE OF GRASSES AND CLOVERS. THAT IS THE BEST GRADE AND QUALITY THAT CAN BE GROWN.** In addition to the numerous advantages we have related we have the best equipment for cleaning and grading all kinds of grass and clover seeds that can be found in any seed house in the world. Remember, in getting prices do not compare them with seeds left by some farmer at a dealer to sell or in exchange for goods; seeds which have never been recleaned and which come directly from the threshing machine. We have had instances come under our observation where "good clover seed" would waste one-half in cleaning. One who has not seen our cleaning equipment or seen us cleaning grass seed has no idea of the noxious weed seed and trash, dirt and inferior light seed that are in timothy and clover. In fact, nearly all grass seeds.

Bromus Inermis

Of all the grasses that grow or have ever been introduced into this 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 other 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 will also make 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 luxuriant pastures. Its value to farmers of dry regions cannot be overestimated. 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.

wonderful rapidity, producing heavy crops and luxuriant pastures. Its value to farmers of dry regions cannot be overestimated. 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.

PRICE: Postpaid, 1 lb., 20c. By freight at purchaser's expense: 10 lbs. or more, 23c; 100 lbs., \$20.00. Bags free.

Defies Drouth, Resists Frost—Best Grass of the Age

Bromus Inermis Is also known as "Austrian Brome Grass," "Hungarian Brome Grass" and "Awnless Brome Grass." The experiment stations of Colorado, Minnesota, North Dakota, South Dakota, and different grass stations of the Agricultural Department, Washington, D. C., have conducted extensive experiments, and all recommend it in the highest terms.

The editors of the following agricultural papers comment favorably upon **BROMUS INERMIS**: Orange Judd Farmer, Chicago, Ill.; Prairie Farmer, Chicago, Ill.; Northwestern Farmer, St. Paul, Minn.; Dakota Farmer, Aberdeen, S. D.; Nebraska Farmer, Omaha, Neb.; Kansas Farmer, Topeka, Kan.; Homestead, Des Moines, Iowa; Wallace's Farmer, Des Moines, Iowa; Breeders' Gazette, Chicago, Ill., and many others. Could there be any better proof of its value than this?

Timothy Is so well known that it needs hardly any description. There is 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 in season, which is at flowering time, it makes a most splendid nutritious hay, while for pasture it cannot be recommended, as almost every farmer knows: its growth is not thrifty and close pasturing is injurious to it. When sown with red 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 most 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.

PRICES: IOWA CHIEF (highest grade). By mail, postpaid: 1 lb., 30c. By freight or express, purchaser's expense: Pk., \$1.00; bu., \$3.75. Bags included.

Clean Seeds

No seed firm in this country takes greater pains and care in the purchase and sale of grass seeds handled than do we, and none have experts of greater knowledge or better judgment. The men in charge of buying, cleaning and grading have all had more than twenty years' experience in our own establishment. We also have the latest and best cleaning machinery, and thus equipped we are in position to furnish the very highest possible quality in this line. No expense is spared either in purchase price or handling to keep up the quality; of course, it costs a little more, but when you see a field of grass, free from weeds, of strong and vigorous growth, you will realize that quality is and should be of greater concern than price.

NOTICE: All prices quoted on grass seed are subject to market changes. If prices have advanced when we receive your order will give you our lowest prices. Better still, let us know how much seed you wish, and we will quote you with samples.

Ratekin's Grass and Clover Seed

A Few Plain Facts

ABOUT GRADES AND QUALITY OF GRASS AND CLOVER SEEDS: The terms so often used by various seedsmen by which different grades of grass seeds are designated, such as "Fancy," "Prime," "Choice," etc., which are not only misleading, but confusing to the ordinary farmer who wants the best there is to be had or grown, and which, by the way, are always the cheapest in the end. On the preceding page we have called attention to the fact that "WE HANDLE BUT ONE GRADE OF GRASS AND CLOVER SEEDS—THE BEST GRADE AND QUALITY THAT CAN BE GROWN." This being so we cannot compete in price with cheap, low grades and quality of seed advertised under these confusing and misleading names, and in order to protect ourselves, our customers and the good name of our **HIGHEST AND BEST GRADES OF PURE, CLEAN SEEDS** we have adopted a trade-mark or insignia, "IOWA CHIEF BRAND," to designate them from lower grades of seed which we will hereafter handle only to compete in price with same grades of seeds listed by other seedsmen, but in justice to ourselves and our trade we wish to call attention to the fact that in cleaning seed so as to make our "IOWA CHIEF BRAND" grade there is much seed removed which, while not sufficiently high quality to grade "IOWA CHIEF BRAND," is suitable for seed, and this will be sold at lower prices, such as Fancy, Choice, Prime and Fair, the quality and grades will be quoted on request in the order here named, but are not listed in our catalogue.

CAUTION

We wish to **WARN** prospective purchasers of Grass, Clover and Alfalfa Seed to be careful in buying their seeds. Fully one-half of the grass and clover seed offered will be foreign imported seed, grown no one knows where, nor nothing about the age of it, and possibly full of noxious weed seeds.

Timothy and Alsike Clover Mixture

This is a better combination for either pasture or meadow than Medium Red Clover and Timothy, as they will flower and ripen at the same time. Alsike Clover can be sown to good advantage on moist soil, and will make a much finer hay than this, being free from fuzz and dust, and will not cause the horses to cough.

The seed that we offer has been raised together, and being both of the same size, they cannot be separated so that we have to sell it at a reduced price. The seed contains a third Alsike Clover and the balance timothy, or is as near in that proportion as we can tell, which is just the proper proportion of sowing. It should be sown at the rate of 8-10 pounds per acre.

PRICE: Per lb., postpaid, 30c. By freight or express, purchaser's expense: 10 lbs., \$1.75; 25 lbs., \$4.00; 100 lbs., \$16.00.

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 climate 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.

PRICE: Per lb., 35c; 3 lbs., 90c, postpaid. By freight: Per bu. (14 lbs.), \$2.25.

Meadow Fescue

We regard this as one of the most valuable grasses for several reasons. Chief among them is that it adapts itself to different conditions of soil and climate and does well all over the United States and Canada, and is also highly valued and largely cultivated throughout Europe. It gives a large amount of early and late feed of good quality, and yields heavily—from two to four tons of hay per acre, which is of fine quality and very nutritious. As a pasture grass it is particularly valuable, as it is a persistent grower, and one of the earliest in spring and the latest in the fall. It never freezes out or winter-kills, and is not affected by drouth. It grows well, wet or dry, bottoms, hillsides and gravelly and loamy lands and clays, and having many fibrous roots running down eight to fifteen inches, resists the drouth.

PRICE: 1 lb., 30c; 4 lbs., \$1.00, postpaid. By freight: Per bu. (14 lbs.), \$2.25.

Bromus Erectus or Meadow Brome Grass

This is a grass which resembles Bromus Inermis in character, but is better suited for poor, light soils and hillsides, where it resists any amount of burning heat, while frost does not affect it. For such places it will prove a blessing, and it will be of inestimable value to countries where the clovers or other grasses do not thrive well. Vilmorin, the noted agriculturist of France, says that twenty years ago he sowed this grass, and the grass still stands extremely well. **BROMUS ERECTUS** grows well on land so poor that other grasses cannot exist, and furnishes excellent pasturage. The seed is sown the same way as Bromus Inermis, at the rate of eighteen to twenty pounds per acre.

PRICE: 1 lb., postpaid, 28c; 1 bu. (14 lbs.), \$2.80; 100 lbs., \$18.00. Ask for prices.

Johnson Grass

As a meadow or hay grass this variety is highly esteemed in the South, where during the hottest and driest seasons it can be relied upon to yield heavily. Its value, as shown by chemical analysis, is better than timothy hay. When cut at time recommended there is no possibility of introducing this grass where it is not wanted. We only advise the sowing of Johnson Grass where it is desired to remain as permanent meadow. Should be sown August to October, or in spring, at the rate of one bushel per acre.

PRICE: 1 lb., 25c, postpaid; 10 lbs., \$1.50; 100 lbs., \$14.00. Bags free.

English or Perennial Rye Grass

The timothy of England. Does well also in this country. Good for both pastures and meadows, but rather coarse for lawns; succeeds well in the shade.

Lb., 20c; 10 lbs., \$1.00; 25 lbs., \$2.35; 100 lbs., \$9.00.

Add 10c per pound on this and all the following grasses if to go by mail:

Italian Rye Grass

Similar to the preceding, but larger and stronger in growth.

Lb., 20c; 10 lbs., \$1.10; 100 lbs., \$9.50.

Pacey's Rye Grass

Similar to English Rye Grass, but smaller and more dwarf. For that reason desirable in lawn mixtures. Will make a showing on a new lawn quicker than most any other grass.

Lb., 35c; 10 lbs., \$3.50; 100 lbs., \$35.00.

Creeping Bent

A very distinct bottom grass, with long creeping stems. Its creeping root and spreading habit form a lasting turf that withstands hard usage better than any other grass.

Lb., 35c; 10 lbs., \$3.75; 100 lbs., \$30.00.

Meadow Fescue

Also known as English Blue-grass. Excellent for permanent pasture. Short crop. Lb., 35c; 10 lbs., \$2.75; 100 lbs., \$25.00.

Tall Meadow Oat Grass

For dry soils. Lb., 30c; 10 lbs., \$2.25; 100 lbs., \$19.50.

Sheep's Fescue

Recommended for short herbage. Should be in all sheep pasture mixtures. Lb., 35c; 10 lbs., \$3.00; 100 lbs., \$25.00.

Meadow Foxtail

Valuable for low ground. Lb., 35c; 10 lbs., \$2.75; 100 lbs., \$25.00.

You Run No Risk

When you purchase our "Iowa Chief Brand" Clover and Grass Seeds, for if not satisfactory on receipt and examination, you may return them and money will be refunded. You can also test them yourself if you desire. Of course we do not guarantee them to grow or produce a perfect crop, as we have no control over the manner of sowing or weather conditions, but do our best to have everything first-class.

Write for Prices

They change constantly and we cannot make a price which will be invariable. We issue a price list each week from February 1st to June 1st. If you are in a hurry order seed and we will send full value of money received on day order arrives. We pay postage at the one and three pound rate only; large quantities shipped at purchaser's expense. Trial packets of any variety at 5 cents each.

SEE SPECIAL PRICES AND RATES ON SEEDS IN PACKETS. ALSO FOR COLLECTIONS ON PAGES 85-86.

Kentucky Blue Grass

Very valuable and exceedingly popular in many sections of the country as a pasture grass. It is productive and unusually early in spring, furnishing delicious food for all kinds of stock. It is not affected by frost or drouth; is suited to a great variety of soils, succeeding best on a moist, rich meadow. For permanent pastures it is particularly valuable, being of dwarf growth, therefore not so well suited for meadows. Unexcelled for lawns. Our seed is all new crop, best grade, "extra cleaned." Sow twenty pounds per acre for pasture, or fifty to seventy-five pounds for lawns.

PRICE: Per lb., 25c; 3 lbs., 75c; postpaid 51 bu. (14 lbs.), \$2.25; 100 lbs., \$15.00.

Orchard Grass or Thumb

Grass. A valuable grass for pasture or hay land, and on account of the 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. It is well suited to shady places, such as orchards and groves. Sow twenty pounds per acre.

PRICE: Per lb., 25c; 3 lbs., 70c, postpaid. By freight: Per bu. (14 lbs), \$2.50; 100 lbs., \$16.00.

Kentucky Blue Grass.

Lawn Seed Grass—Beautify the Home Place

ABSOLUTELY THE BEST LAWN SEED THAT EXPERIENCE CAN SUGGEST, OR THAT MONEY CAN BUY.

A smooth, velvety lawn surrounding a house adds not only to the value, but enhances the enjoyment of every home, whether it be in city, town or country. When properly made a lawn is the best investment a home owner can make. The following suggestions may be of benefit, especially to those who are about to make a new lawn.

The most important thing to consider in selecting seed for lawn grass 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: By mail, postpaid, lb., 40c; by express or freight at purchaser's expense, lb., 30c; 4 lbs, \$1.10; 10 lbs, \$2.75; 100 lbs., \$27.00. Bags free.

Ratekin's Superior Clover Seed

Ratekin's Iowa Chief Brand Clover Seed.

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.

PLEASE NOTE: Prices of Clover and Timothy are subject to fluctuations of the market. Buyers should write for firm and lowest price before buying, which we quote by return mail. Then there is sure to be no misunderstanding.

In other places in this book we have called attention to the value and importance of purity and good, strong, germination of all seeds, especially grasses and clover.

Without the use of the microscope the ordinary farmer, or anyone else, for that matter, would hardly detect the difference. The man who sold the seed to the storekeeper may mean well and be the best fellow in the world, but such seed is always dear at any price, even as a gift, when you can buy our high-grade seed at reasonable—our lowest and best prices.

Medium Red Clover

This is the most important of all clovers and the standard everywhere for hay and pasture. It is known as Common Red or June Clover in many sections. Our Iowa grown clover seed has become widely known for its purity, strong vitality, hardiness, vigorous and healthy growth, and stooing qualities, so that now we receive many orders from the most distant parts of the United States. Well-posted farmers are beginning to appreciate the difference between it and ordinary stock. Our "IOWA CHIEF BRAND" grade is the plumpest, cleanest, purest, fanciest grade; tested and of high vitality. Farmers usually sow fifteen to twenty pounds of clover seed to the acre when sown alone, but this seed is so choice that six or seven pounds is really enough if conditions are favorable, but we recommend sowing ten pounds, so as to be sure of a perfect stand. About five pounds if sown with timothy.

Per lb., 30c; 3 lbs., 80c, postpaid. Per bu., \$12.00.

Alsike or Swedish Clover (*Trifolium Hybridum*). A very hardy clover. Perennial. On rich, moist soils it yields an enormous quantity of hay or pasturage, but its greatest value is for sowing with other clovers and grasses, as it forms a thick bottom and greatly increases the yield of hay; cattle prefer it to any other forage. The heads are globular, fragrant and much liked by bees, which obtain a large amount of honey from them. Sow in spring or fall at the rate of six pounds per acre when used alone.

"IOWA CHIEF BRAND." Lb., 35c, postage paid; pk., \$4.25; bu., \$16.50; 100 lbs., \$27.00.

NOTE: At pound prices we send by mail, postpaid. In larger quantities the prices are for seed sent by express or freight (sacks included), at purchaser's expense.

Sweet Clover (*Melilotis Alba*, or *Bokhara*). Tall, shrubby plant, bearing innumerable small white flowers; very valuable for bees, and sown largely along the roadside by beekeepers. Both leaves and flowers have a delightful fragrance. Sow ten pounds per acre.

Per lb., 35c; 3 lbs., \$1.00. By freight: 5 lbs. or more at 25c per lb.

White Dutch (*Trifolium Repens*). In connection with Kentucky Blue Grass it furnishes finest and most nutritious pasture for sheep and cows. Also used for making lawns. Sow six to eight pounds per acre.

Lb., 45c, postpaid; by express or freight, lb., 35c; 20 lbs., \$6.75.

Bur Clover (*Medicago Mac Ulata*). Is used mainly in the Southern States and in California. It fills in the season when other forage plants have become dried up by the summer heat. Stock of all kinds feed upon the burs, which contain a large portion of nutritious matter. Sow fifteen to twenty pounds per acre in August, September or October.

Per lb., 25c, postpaid. Prices in quantities, 15c per lb.

Few persons detect impurities in grass seeds unless the seed is very foul. Frequently our farmer friends have watched the recleaning of timothy or clover seed by our machines, and noting the impurities taken out have wondered where they came from, as the seed seemed without dirt or trash before cleaning. Other seed dealers who have happened to be in our warehouse when we were cleaning clover have often remarked that the seed looked so extra nice they should not reclean it. From those same lots of seed we were cleaning out three to five pounds per bushel of trash, sand and shrunken clover seed. This makes quite a difference in real value, and our seed is really worth \$1.00 to \$2.00 per bushel more than that obtained from most dealers.

A Warning During the past few years immense quantities of low grade, impure and adulterated clover containing the most noxious weed seeds have been imported from Europe, Canada and Chili and shipped to the farmers of this state. In some cases where samples have been sent to the Department of Agriculture reports show that the seed contained Canada Thistle, Dodder, Wild Mustard, etc., and farmers burned the seed instead of sowing it.

SEE SPECIAL PRICES AND RATES ON VEGETABLE AND FLOWER SEEDS ON PAGES 85-86.

Japan Clover (*Lespedeza Striata*). Low, perennial spreading habit. Stands excessive drought well; flourishes on poorest soil in Southern States. Sow fifteen pounds per acre. It makes a fair hay, and stock eat it readily when green. It is also valuable for turning under as green manure. Sow in spring broadcast at the rate of thirty pounds per acre.

Per lb., 30c. Write for quantity prices.

Mammoth Red Clover (*Trifolium Pratense Perenne*). Also called Sapling or Pea Vine Clover. This greatly resembles the Medium Red, but is of much taller and more vigorous growth. Nothing equals it for hog pasturage, as it will produce an enormous yield and is of the highest feeding quality. It gives quick results, making an unequaled crop, and is an excellent pasture grass. If your soil is poor and needs enriching there is no fertilizer as cheap and good as sowing Mammoth Clover and plowing the crop under.

"IOWA CHIEF BRAND." Lb., 45c, postpaid; 10 lb. lots, bu., \$13.00.

Giant Crimson Clover (*Trifolium Incarnatum*). This is an annual variety. The yield in fodder is immense, and after cutting it at once commences to grow and continues until severe freezing weather and makes good hay. Sow in April or May, twenty pounds of seed per acre. The only objection to this is that it winter kills in this latitude. Desirable as a soiling crop.

"IOWA CHIEF BRAND." Lb., 30c, postpaid; pk., \$3.00; bu., \$11.50; 100 lbs.

White Clover (*Trifolium Repens*). A small headed white species that is very fragrant and exceedingly desirable for mixing with lawn grass seeds. Although it is not a heavy producer it is of great value for use in permanent pastures, as it affords a most nutritious food for sheep and cattle. This variety will succeed in almost any soil. About six pounds are sown to the acre.

"IOWA CHIEF BRAND." Lb., 45c, postpaid; 10 lb. lots, 35c a lb., by express.

Alfalfa---The Great Agricultural Clover

NEBRASKA DRY LAND GROWN ALFALFA.
OUR CIRCULAR ON CULTURE OF ALFALFA IS FREE.

Alfalfa Is King of All Crops.

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. It has as much protein as wheat bran. 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 car loads are being ground every week by alfalfa mills to feed cattle, hogs, horses and poultry. It will grow three to five crops per year. Alfalfa in money value is worth forty-five per cent more than other clovers and sixty 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 subsoiler. These become an immense magazine of fertility to be drawn upon by other crops for many years after, should you ever plow it up.

Alfalfa.

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 soon rots out the roots.

Nebraska Dry Land Grown Alfalfa.

The great bulk of American seed is grown under irrigation and does not possess that vitality in adjusting itself to normal conditions from seed that it does where grown under natural conditions. We purchase all our seed direct from the growers in southern 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: 1 lb., postpaid, 35c; 3 lbs., \$1.00. By freight or express: Peck, \$3.00; bu., \$10.00; ½ bu. at bushel price.

Turkestan Alfalfa.

Seed of this Alfalfa collected in Asia have been so very satisfactory that we have no hesitancy in recommending it as more hardy than the ordinary variety, having stood a temperature of forty-five degrees below zero when the ground was bare. Makes large top growth; also fine root growth.

Lb., 40c, postpaid; by express or freight at purchaser's expense, lb., 30c; bushel, \$12.00.

Ratekin's Finest Special Grass Mixtures

These Clover Grass Mixtures are selected with the greatest of care and are composed of varieties best adapted for different kinds of soil and purposes. From our experience as well as experience of our customers in every part of the country, we are enabled to select in these Clover Grass Mixtures not only varieties that are suited to the soil, but in the right proportion in each mixture. In every instance we mention the quantities which we recommend to be sown per acre and not only have these proven to be sufficient, but have proven to be equally successful and sufficient with our patrons.

OUR SPECIAL MIXTURES FOR HAY.

- No. 1. For moist ground and rich soils. Sow eighteen pounds per acre. Meadow Foxtail, Italian Rye Grass, Sweet Vernal, Meadow Fescue, Timothy, Alsike, Tall Meadow Oat Grass.
- No. 2. For moist ground which is occasionally overflowed. Sow sixteen pounds per acre. Tall Fescue, Red Top, Timothy, Meadow Fescue, Meadow Foxtail, Alsike.
- No. 3. For high and dry ground, light or medium soils. Sow twenty pounds per acre. Red Fescue, Timothy, Red Clover, Crested Dogtail, Sweet Vernal, Lucerne, Hard Fescue.
- No. 4. For high or dry ground, heavy or strong soil. Sow twenty pounds per acre. Tall Meadow Oat Grass, Sweet Vernal, Timothy, Hard Fescue, Red Top, Red Clover, Meadow Fescue, English Rye Grass, Alsike.
- No. 5. For top seeding on marshes and swampy places occasionally overflowed, the following mixture is adapted. Sow ten pounds per acre. Meadow Foxtail, Tall Fescue, Floating Meadow Grass, Red Top, Water Spear Grass.
- No. 6. For light, sandy and gravelly soils. Sow twenty pounds per acre. White Clover, Hard Fescue, Soft Brome Grass, Red Top, Fescue Grass, Bromus Inermis, Sheep's Fescue.

OUR MIXTURE FOR PERMANENT PASTURE.

- No. 7. For moist ground and rich soils. Sow twenty pounds per acre. Meadow Fescue, English Rye Grass, Red Top, Fowl Meadow, Italian Rye Grass, Alsike, Meadow Foxtail, Blue Grass, White Clover, Orchard Grass, Timothy, Red Clover.
- No. 8. For high and dry ground, clay or heavy soils. Sow twenty-two pounds per acre. Red Fescue, English Rye Grass, Timothy, Meadow Fescue, Italian Rye Grass, Red Clover, Tall Meadow Oat Grass, Blue Grass, White Clover, Orchard Grass, Alsike.
- No. 9. For high and dry ground, light soils. Sow twenty-two pounds per acre. Hard Fescue, Lucerne, English Rye Grass, Red Fescue, Yellow Oat Grass, Red Clover, Meadow Fescue, Red Top, White Clover, Crested Dogtail.
- No. 10. To improve pastures by top seeding, or for low, rich, marshy ground. Sow ten pounds per acre. Fowl Meadow, Tall Fescue, Creeping Bent, Red Top, Alsike.
- No. 11. For top seeding for wood pastures, orchards and other shady places. Sow ten pounds per acre. Tall Meadow Oat Grass, Sweet Vernal, Timothy, Orchard Grass, White Clover, Meadow Foxtail, Blue Grass, Alsike.
- No. 12. For sheep pastures on light, sandy soils or dry uplands and hillsides. Sow twenty-two pounds per acre. Sheep's Fescue, Crested Dogtail, Sweet Vernal, Hard Fescue, White Clover.

PRICES FOR ANY OF THE TWELVE MIXTURES: Per lb., 35c, postpaid; 20 lbs., \$4.25; 100 lbs., \$20.00, by express or freight.

NOTICE: It is difficult to over estimate the importance of a good selection and proper mixture of clover and grass seeds for permanent pasture or for hay. The above mixtures are correct. Don't let the value of a few cents stand in the way of your getting the best.

QUICK, ANNUAL HOG PASTURE MIXTURE; BEST IN THE WORLD; \$4.00 per cwt.

This mixture is one of the best and most profitable ever devised by man. It comes early and quickly and furnishes a green, nutritious feed early in the season when hogs and other stock crave and most need green feed. If you have HOGS don't fail to sow one, two, three or ten acres of it, dependent on the number of hogs or pigs you have. It requires but 100 pounds of seed per acre, but is worth a hundred dollars per acre to every farmer that has twenty or more hogs. IF YOU HAVE BUT TEN HOGS then sow a half acre to this **QUICK ANNUAL HOG MIXTURE**. It will pay you 100 per cent above the cost of the seed.

SOW ONE, TWO OR THREE ACRES OF PANICUM CRUSGILLI FOR FORAGE FOR YOUR HORSES, CATTLE AND SHEEP, BUT DON'T FAIL TO SOW ONE, TWO, THREE OR TEN ACRES OF OUR QUICK ANNUAL HOG PASTURE MIXTURE. They are **EACH MONEY MAKERS AND STOCK SAVERS. IT WILL PAY YOU BIG TO SOW LIBERALLY OF THEM.** Price for quick hog pasture, \$4.00 per 100 lbs.

Celebrated Mastodon Carrot for Stock

The Mastodon Stock Carrot.

Glory enough! Sound the trumpets; ring the bells; clap your hands! Everybody shout for joy and hallelujah who plants our Mastodon Carrot. There may be difference of opinion regarding many varieties of seeds, but there is no room for difference of opinion as to which is the best—Pre-eminently best—Stock carrot. The Mastodon Carrot **IS THE ONE TO PLANT**. It yields more tons and of greater nutritious qualities than any carrot that grows. Roots often measure fifteen to twenty inches long and twenty inches in circumference, yielding from sixteen to forty tons per acre. This is no extravagant statement. Plant same as stock beets.

Large packet, 5c; oz., 10c; ¼ lb., 25c; lb., 80c, mail postpaid. By express or freight, 5 lbs., \$3.00.

Millet

Millet Nothing pays better for a stock raiser and dairy farmer than a few acres of Millet of some kind, for it is of the greatest feeding value and milk producing quality and yields at least twice as much hay per acre as timothy and clover. It should be sown regularly every year, and not merely as a catch crop. When spring is so unfavorable that other crops fail to grow, or when the season is so late and wet that other crops will not mature, then there is always the greatest demand for millet. Write for lowest prices, stating amount wanted.

German or Golden 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 four to five 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 yield of five tons of hay per acre is nothing unusual. Sow three pecks per acre.

PRICE: Large packet, 5c; 1 lb., 25c, postpaid.

New Siberian Millet A millet introduced several years ago from Russia, and an entirely distinct variety, the seed being of a red cast color, but heads the same as common millet. It stools heavily and the joints being so close together the plants are covered with blades. This is a heavy yielder, and the hay is of very fine quality. It yields from forty to fifty bushels of seed per acre. Being an introduction from the extreme North, it is very hardy and will prosper under conditions where other varieties fail.

PRICE: Large packet, 5c; 1 lb., 25c, postpaid by mail. Not prepaid, \$1.50 per bushel.

Early Fortune Millet An extra early variety, of which astonishing yields are reported. It is very early, and is rust proof, and chinch bugs will not eat the plant. The seed is of a beautiful red color, and is two or three times the size of German Millet. This variety heads in from twenty-five to thirty-five days. It gives a large yield both of seed and fodder. It can be fed to horses and other stock without injury, even when cut so late that the seed has formed.

PRICE: Package, 5c; 1 lb., 20c; 10 lbs., 40c; 50 lbs., \$1.60; 100 lbs., \$3.00.

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.

A Quick Producer 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 7½ feet. It is pre-eminently the grass to sow if you are going to be short on hay for your cattle and sheep.

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 of the Billion Dollar Grass 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 twelve 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.

FOR HAY: Cut when in bloom—rather sooner than later, as it makes better hay without the seed heads than with them. The hay is then healthier and of finer quality and in curing treat as you would a rich field of clover.

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—yes, possibly death. 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.

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 six feet tall, yielding from 26,000 to 50,000 pounds of as rich, green fodder as the world has ever seen. Man 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, and the 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 pasturage all fall, and horses and hogs and sheep and cattle and poultry will eat it greedily.

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. 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 feed, either ground or coarse, makes excellent food, although it is inclined to be slightly laxative.

Cows, calves and other stock lock 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 Peasat 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.

PRICE BILLION DOLLAR GRASS: Package, 10c; 1 lb., 25c, postpaid. By freight: 12 lbs., \$1.20; 20 lbs., \$1.40; 50 lbs., \$3.00; 100 lbs., \$5.50; 250 lbs., \$12.50.

James A. Leppo, Carroll County, Md.: "I am greatly pleased with the Billion Dollar Grass. I believe it will be a good thing in this country. It was from five to six feet high when I cut it the first time."

George A. Wright, Orleans County, Vt.: "Billion Dollar Grass is a great grass for yield, easily making six tons of hay per acre. It is a quick growing grass. Stock like it very much. I wish every farmer would try it."

J. E. Park, Marshall County, Tenn.: "I planted Billion Dollar Grass June 15th; July 20th, in thirty-five days, it was ready to cut—five feet high. It is a splendid grass. I want enough for five acres."

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.

Golden German Millet.

Red River Grown Seed Potatoes

In order to secure the best possible yields, combined with the best quality, there is no crop grown that a change in seed is so essential as in seed potatoes. If our selected Red River grown are planted, 300 to 600 bushels can be as easily grown per acre as 50 to 100 bushels scrub stock. To grow a big, fine potato crop will not cost any more than to grow a crop of small potatoes which are hardly marketable at any price. Nothing gives us more genuine pleasure and satisfaction than the marvelous increase we have had in our potato trade since we have had our seed potatoes grown exclusively in the extreme north. There is a world of difference between Northern Red River grown potatoes and eastern or along the lakes. We have taken potatoes grown in Iowa, Illinois, Michigan and New York and planted them side by side with the same varieties grown in the Red River Valley and never got half a crop, while the Red River Potatoes would roll out by the hundreds of bushels per acre, often yielding 400 to 600 bushels. Other potatoes would give us from thirty to fifty and sometimes as high as 150 bushels per acre, but this was a very rare yield. Our Northern Grown seed potatoes insure a vigorous growth, an early maturity and the largest crops and finest quality and flavored potatoes in the world. We have hundreds of customers who buy ten to twenty barrels a year for their planting purposes, because it more than doubly pays them. Think of 200, 300, 400, 500 and even 600 bushels per acre and then compare it with the average yield of potatoes from home grown sorts.

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 that it is 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 bags, boxes or barrels. All potatoes are carefully packed and delivered to the railroad 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.

Ratekin's Red River Special

(Earliest and Best in the World)

A Brand New Extra Early Potato FOUND BY ACCIDENT IN A FIELD OF EARLY OHIOS. I have grown potatoes in my garden for table and family use. I have grown them on my farms for my seed trade, and I have watched them growing in the fertile valley of the Red River of Minnesota and North Dakota; have also inspected the potato crops and fields of Michigan, Maine, New York and other potato growing district and have tested every new origination as well as older sorts; in fact, have made the potato growing question one of my leading specialties and have discarded all the inferior varieties and sorts and have never offered or catalogued anything in the potato line except those varieties that I have thoroughly tried out and found to be of the best in quality, yield and flavor.

Our seed potato farms are situated in the Red River Valley Minnesota and North Dakota, close to the boundary line of Canada in the very heart of the best potato growing country in the world. At the time of my visit Minnesota and the Dakotas were stricken with drought and the crops in general were not in the best of condition. Potatoes especially were affected and presented an unfavorable appearance as our foreman took me over the grounds. He stated that he had something in the line of a "freak" which he wanted me to examine, and sure enough, at the top of a little knoll, like a rose among thorns, growing thrifty and luxuriant, was the future parent of this new potato—"RATEKIN'S RED RIVER SPECIAL."

To be sure, I was interested and immediately gave this freak of freaks a critical examination. It was right after blooming and the little seed pods or balls were already formed. The plant presented the appearance of potato vines grown under ideal conditions, and it was a mystery how this vine could appear so healthy and thrifty. It may be well to state the seeds of the potato are not the tubers at the base of the vine, as is generally supposed, but little roundish oval berries which form on the pistil of the flower or bloom. This fruit is of a green color tinged with violet brown, and average about an inch in diameter. The pulp of this fruit is very acid, of a green color, and poisonous. The seeds are white, kidney shaped and flat. "Like produces like." I gave strict instructions to the grower and advised him to test out the seed in the trial grounds. Luck was with us and out of a dozen seeds planted we obtained one true vine, which we propagated from by placing the tubers in a hotbed without cutting them, and as soon as the sprouts were well furnished with roots they were taken off at the surface of the potato below the roots and planted separately in pots. By this process, although tedious, we were able to breed up a goodly quantity of plants, the tubers of which were planted covering about five acres. We offer these tubers to our customers the coming season.

DESCRIPTION: The vines are strong, with exceptionally luxuriant, deep green foliage, making a healthy vigorous growth when other varieties are cut down by drought. The tubers lie closely in the hill and are ready for table use in six weeks from planting. They are similar to the Ohio in shape, with small eyes and there is but little waste when paring. The skin is thin, smooth and of a snowy whiteness. The table quality is of the choicest, the flesh being pure white, dry and floury. It cooks quickly and has a delicious flavor. All in all it is the best Potato we have ever grown or tested and we urge our customers to give it a thorough trial. For early table use it has no equal.

PRICE: Lb., mail postpaid, 35c; 3 lbs., \$1.00. By freight or express, purchaser's expenses: Peck, \$1.00; ½ bu., \$1.75; bu., \$3.00; 5 bu., \$14.00.

Ratekin's New Majestic

The World's Largest Potato. (Red River Grown).

THE LARGEST, HANDSOMEST, SMOOTHEST AND BEST FLAVORED EARLY POTATO IN THE WORLD.

Never before in the history of the potato world has there been such an enormous yielding Extra Early Potato introduced. The finest, Grandest and most Up-to-date Early Potato ever offered, originated and introduced by us six years ago. As modest as we are, we cannot restrain our enthusiasm. It's a beauty, such as you never saw before. We christened it "The Majestic." Ring the bells: Stand aside: Clear the track: Make room for this Potato: The Great Majestic, General Purpose Early Potato: None in the wide world its equal. It stands alone: The Great Majestic all purpose potato. Listen, Read, Order, Plant. Make money while you can. Here is your opportunity. We wish we had space to tell you all we know about this wonderful Large Early Potato. It is indeed the most handsome potato ever discovered. Just the right shape; just the right size. In fact, it is the ideal of all varieties. No potato is superior in eating qualities year in and year out. It stands to other potatoes as rich Jersey cream does to skimmed milk. As early as the earliest, and is better than the best.

It is a potato we know will not only make dollars for the grower, but will please him beyond doubt as well. A striking characteristic of this new Majestic beauty is its productiveness, same amount of ground than any other sort ever before discovered. What more can we say? Need we say more? Our plea with you is to plant freely of this new potato. You will find it the most profitable potato you ever planted. We know you will thank us and become as enthusiastic as we when once you see the fine potatoes and enormous yield it produces. We know we will be unable to supply the enormous demand there will be for this new potato the coming season. If you are not ready to order your seeds now write us how many to reserve for you, making remittance to cover half your order; then when they can be shipped safely without danger of freezing, send balance, and seed will be sent promptly and at once.

Ratekin's New Majestic.

Stand aside; make room for this noble potato, this monarch general purpose potato. None in the wide world its equal. It stands alone. It is without question the earliest potato, the best potato of the age. It is ahead of earliest in quality and yield. It is the great general purpose potato of the world. By this we mean it is extremely early, fit for table use ahead of all others. It is good for midsummer; it is good for late summer; it is good for fall, and it is magnificent to put into winter quarters, where it will keep splendidly all winter and give you the finest flavored, best quality eating potatoes in the spring and early summer. We never can tire extolling the merits of this potato. There is really no potato that is its superior and if we had but one potato to plant this would be the potato every time. The yield the past season was astonishingly large, acre after acre yielding from 200 to 500 bushels. It is a wonderful potato in every respect.

PRICE: Postpaid, 1 lb., 30c; 4 lbs., \$1.00. By freight or express, purchaser's expense: Peck, 70c; ½ bu., \$1.25; 1 bu., \$2.00; 5 bu. and over, \$1.90 per bu.

Red River Grown Seed Potatoes

Extra Early Six Weeks.

THE HANDSOMEST AND EARLIEST; GRAND, FINE.

Ratekin's Early Six Weeks.

skin, and very white flesh. Tubers grow close together in the hill, and it is not unusual to get from ten to fifteen good potatoes of marketable size from a single eye. The potatoes begin to form when the vines are only four or five inches high. The tops and tubers grow rapidly, and at six weeks from planting are of good marketable size.

PRICE: Postpaid, 1 lb., 25c; 3 lbs., 60c. By freight or express, purchaser's expense: Peck, 50c; ½ bu., 90c; 1 bu., \$1.75; 5 bushel or more, \$1.60 per bushel.

Pat's Choice

Was first introduced in 1900, since which time no other late variety has gained such wonderful fame. The Greatest of All Late Potatoes. IT OUTYIELDS ANY OTHER LATE POTATO; IS OF THE FINEST QUALITY AND FLAVOR. There is nothing like it. Long, handsome and very smooth. Skin is a beautiful pink color, always dry and mealy, whether baked or boiled. It is medium late in season, but an enormous yielder. If you want the best late potato that is grown, the one that is on top for quality, on top for smoothness and handsome appearance and on top for yield, choose Pat's Choice, and you will make no mistake.

PRICE: Postpaid, 1 lb., 25c; 3 lbs., 60c. By freight or express at purchaser's expense. Peck, 70c; ½ bu., \$1.25; 1 bu., \$2.00; 5 bu. and over, \$1.90 per bu.

Ratekin's New Majestic.

Introduced by us five years ago, it now ranks as we predicted, "King of Earlies," and the great favorite with all who have planted it. In North Dakota, where we have these potatoes grown, it scoffs at dry weather and drouth, for it always gets there ahead of both; then there is no potato grown that adapts itself to all kinds of conditions more readily than this early wonder. It is not only an extra early, six weeks' potato, but it's good all summer and fall and through the winter. In fact, there is no potato grown, early or late, of such fine keeping qualities. It is a handsome oblong, maturing ready for table use in forty to forty-five days from time of planting, or at least a week to ten days earlier than the nearest rival. As shown in the accompanying illustration, it is a smooth, even surface; white

Ohio Potatoes Our Specialty

ALWAYS RELIABLE.

Red River Valley, the ideal location for the propagation of potatoes. We take the very best potatoes, from which the eyes are cut. These are prepared in such a way that they will keep in good condition for a month.

PRICE OF POTATO EYES, POSTPAID.

Per 60	Per 100	Per 250	Per 1,000
\$0.80	\$1.10	\$2.50	\$8.50

With careful culture sixty eyes produce four to five bushels; 250 eyes fifteen to twenty bushels.

"Eureka." Extra early. The vines resist drouth to a remarkable extent and the crop is matured before the hot, dry summer sets in. Planted with the Bovee, the EUREKA matured ten days earlier and the vines were entirely dried up, while those of Bovee made a second growth. It is an excellent keeper for so early a potato. We have eaten tubers which were in good condition the spring following. The firm, white flesh is of good flavor when cooked; the tubers are quite broad and of a shortened oblong form, thick through, with few eyes. The skin is smooth and of a snowy whiteness.

PRICE: Per lb., 30c; 3 lbs., 70c, postpaid. By express or freight: Per peck, 73c; 1 bu., \$2.00; 5 bu. or over, \$1.90 per bu.

Rural New Yorker No. 2.

One of the largest yielding 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 drouth 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: Per lb., 30c; 3 lbs., 70c, postpaid. By express or freight: Per peck, 73c; 1 bu., \$2.00; 5 bu. and over, \$1.90 per bu.

No matter how many new early varieties are introduced the Early Ohio holds its place at the head of other early sorts. We have more calls for it than any other variety. Car loads of this standard early variety are shipped every year to southern states for seed purposes, and the product thereof is shipped back again to our largest potato markets. Our Red River grown Early Ohio are vigorous and healthy, will naturally produce the largest crops and mature fully ten days to two weeks earlier than such as are bought up by seed dealers in large cities, where they are picked up in the open markets, and as long as they have a reddish color and an oblong or oval form call them "Early Ohio." Our stock of these potatoes is extremely fine this season, and are absolutely pure in variety.

PRICE: By freight or express, purchaser's expense: Peck, 70c; ½ bu., \$1.25; 1 bu., \$2.00; 5 bu. or over, \$1.90 per bu.

OUR POTATOES ARE GROWN IN THE FAR NORTH, exclusively in the Red River Valley, North Dakota and Minnesota. Red River stock always commands a premium over potatoes produced elsewhere.

Potato Eyes By Mail.

Best Way. There are many people living in cities or towns who have a small garden and would like to devote a portion of it to potatoes, but do not feel like paying the freight or express charges on a small quantity of seed. The freight alone on a few potatoes necessary to plant this space would amount to as much as we ask for eyes delivered at your door.

Our stocks were all grown in the best potatoes, from which the eyes are cut. These are prepared in such a way that they will keep in good condition for a month.

Red River Grown Seed Potatoes

Carman No. 3

THE BEST MAIN CROP

POTATO. The fame of this potato is abroad in the land, and it is unquestionably the very best main crop 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. The tubers are borne very close to the plant, a single turn of the fork turning out every potato. It is of large size and of 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:** By freight, per peck, 60c; $\frac{1}{2}$ bu., \$1.00; 1 bu., \$1.90; 5 bu. and over, \$1.75 per bu.

Banner Potato

Introduced in 1899. The Banner is the finest main crop white potato on the market. No variety ever introduced has made as good a record in so short a time with all classes of growers on all kinds of soil. None surpass it in uniform handsome appearance. Its shape is a little oblong and slightly flattened, cooking through easily. The eyes are very shallow. Size large and desirable. Very few under market size. Always smooth and regular in form; strong and vigorous from the very sprout. The flesh is very white, and whether boiled or baked has the same fine table qualities—always dry and floury. Season medium late. Choice sorted northern grown stock.

PRICE: Peck, 60c; $\frac{1}{2}$ bu., \$1.00; 1 bu., \$1.90; 5 bu. or over, \$1.75 per bu.

Burbank

A **STANDARD LATE VARIETY**. Continues in good demand and is more largely used than any other. It is of good size, of fine form and an excellent yielder. The flesh is white, very mealy and of fine flavor and quality. The best potato for baking. This variety is well adapted to heavy soils. By freight, $\frac{1}{4}$ bu., 60c; 1 bu., \$1.90; 5 bu. at \$1.75; by mail, 100 eyes, postpaid, \$1.00.

Early Rose

This variety has been a great favorite for many years and many growers still claim that it has never been excelled in quality and productiveness. Potatoes are long in shape, good size and light pink in color at the bud end. They cook mealy and are of the finest flavor. $\frac{1}{4}$ bu., 65c; 1 bu., \$2.00; 5 bu. at \$1.90; 100 eyes by mail, \$1.00.

White Ohio

These are the same in all particulars as the Extra Early Ohio except in color, which is white or nearly so. White potatoes are preferred in most all markets, and as this sort is just as early, of as good quality and as productive as the Early Ohio, it will unquestionably supersede the older variety when it becomes better known.

PRICE: $\frac{1}{4}$ bu., 60c; 1 bu., \$1.90; 5 bu. and over, \$1.75; 100 eyes by mail, postpaid, \$1.00.

Bliss' Triumph

Bliss Triumph is a standard extra early and one of the leading early potatoes all through the South. The tubers are nearly round, smooth, medium in size, reddish pink in color. Vines are small and compact, with short, thick stalks and broad leaves. This is one of the hardiest varieties known, and is not susceptible to rot, scab and other diseases; in fact, it can be grown on the most heavily manured land without danger of rot. It is the standard variety the country over for making a quick crop. With this variety it is peculiarly important that the best seed possible be secured as it is inclined to be a shy yielder. Northern grown Triumph will be found the best and most productive strain obtainable for all parts of the country; our stock this year is exceptionally fine.

PRICE: Lb., 30c; 3 lbs., 75c, postpaid. By freight: $\frac{1}{4}$ bu., 60c; 1 bu., \$2.00; 5 bu., \$1.90 per bu.

Sir Walter Raleigh

One of Mr. Carman's latest and best introductions—a seedling of the Rural New Yorker No. 2. Sir Walter Raleigh resembles the Rural in shape, but is a little more buff in color; the flesh is whiter, and it is from four to six days earlier than the Rural, and the tubers are more uniform with practically no small ones, every one being of marketable size. It is unquestionably the best of the Rural type, being not only the finest eating potato, but also the heaviest yielder of that class. Peck, 60c; $\frac{1}{2}$ bu., \$1.00; 1 bu., \$1.90; 5 bu., \$1.75 per bu.

Change Your Seed

There is profit as well as satisfaction in planting our seed, for the additional yield to be secured from a change to our Red River seed ought every time pay for the seed ten times over, so that the investment is a profitable one.

Seed Sweet Potatoes

Many people hesitate to grow sweet potatoes, believing that a great deal of extra work is necessary to produce the crop. The only extra work connected with it is the production of plants, digging a pit and filling with stable manure, covering with dirt and placing the tubers. It is not, however, difficult to grow plants. About the only difference in the field culture is that the ridges are made for sweet potatoes before setting out the plants. The only secret is to keep them free from weeds and the ground mellow. After the vines begin to run they will keep down the weeds themselves. A light, sandy soil is best.

The seed sweet potatoes which we offer are grown, stored and handled especially for seed purposes. They are not cold storage stock on which the germ has been killed, but are fresh and vigorous. It is necessary that they be handled quickly in spring as they do not keep well after being taken from the storage bins. We cannot guarantee them to all be sound upon arrival and we try to protect our customers by prompt service. For this reason we hold the potatoes until the weather is settled and then fill all orders at once so as to get them to our customers promptly. We usually ship from April 12th to 20th and notify our customers when we start them. Prices are subject to change of market, and we will be pleased to quote firm prices in March. Your order will be filled at ruling prices on date of shipment and you will be advised should the price advance or decline before April 10th.

Early Yellow Jersey

An improvement on the Yellow Nansemond. In spite of the many so-called new varieties, all of which we have tested, Early Jersey holds the first place. The earliest and most productive; of large, short chunky shape and of the very best quality. It will probably always remain the most popular market sort. Peck, 50c; bu., \$1.75; barrel, \$4.00. Ask for price in quantities.

Red Jersey

Similar in shape to our Yellow Jersey, but darker red color. Do not rot so quickly as the other kinds and are preferred by many. Quality is excellent. Peck, 75c; bu., \$2.25; barrel, \$5.00.

White Southern Queen

These are the large "Yams" which are so popular in the South. Even the seed potatoes are monster size and often weigh several pounds each. Peck, 75c; bu., \$2.00; bbl., \$1.50. Any of the above varieties of sweet potatoes by mail, postpaid, at 35c per lb.; 3 lbs., \$1.00.

Sweet Potato Plants

We make a specialty of growing and shipping Sweet Potato Plants. We have sent them into every part of the United States and even as far as Germany in good condition. They are carefully packed with moss in box or baskets and sent by mail or express. Choice Sweet Potato Plants of above varieties are ready about May 10. We prepay all transportation charges and notify you by mail when shipment is made. Be sure and give your express office. We guarantee safe arrival of plants. No risk in ordering.

PRICE: Prepaid, 100 plants 40c; in 500 lots, 35c per 100; in 1000 lots, 30c per 100.

"LISTEN TO THE PEOPLE"

Read What a Few Farmers Say: We have Thousands of Others Like Them A FEW TESTIMONIALS FROM OUR CUSTOMERS

"THE PEOPLE VOICE THE SENTIMENT. THEY KNOW WHETHER A THING IS RIGHT OR WRONG. THEY KNOW WHETHER IT IS GOOD, BAD OR INDIFFERENT. THEY PRAISE IT IF IT IS GOOD AND CONDEMN IT IF IT IS BAD. THE OPINION OF THE PEOPLE IS WORTH A HUNDRED TIMES MORE THAN THE OPINION OF THE MAN WHO OWNS THE PROPOSITION THAT IS BEING TALKED ABOUT."

Forest Green, Mo.

Gentlemen: Please send me a copy of your catalogue. I have planted your seeds and they have always given good results and satisfaction and I want to order more seeds for the coming season. Truly yours, O. H. WILLIAMS.

Jefferson County, Okla.

Gentlemen: I have sent to you for seeds for the last two years and they have always proven good, and I have been well pleased with them and shall want to send for my seed again this year. Kindly send me your catalogue by return mail. Yours truly, M. M. STOW.

Hope, Ark.

Gentlemen: Please send me one of your seed catalogues for 1913, as I want to order some seeds from you. When I lived in Oklahoma, I bought seeds from you, and found them to be everything that you claimed for them. They gave splendid good results. Truly yours,

Wright City, Mo., March 2, 1912.

Gentlemen: I received the seed I ordered from you and they are fine. Yours truly,

Dear Sir: The seed I bought from you last year grew so well I thought I would try some again this year. Yours truly, PHILIP WEIGAND.

Dubuque, Iowa.

Gentlemen: I received the seed I ordered from you and I am well pleased with them. When in need of seeds again I will send you an order for same. Truly yours,

MRS. SARAH SPENSLEY.

Mechanicsburg, Pa.

Dear Sirs: The seeds I ordered and received from you last year did remarkably well considering the dry weather that we had through part of the summer. The seed all grew and did nicely. I am enclosing you an order for more seeds for the coming season. Yours truly,

DANIEL ASHENFELTER.

Bard, Texas.

Gentlemen: Please send us your 1912 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. CLEFFE.

Caputa, S. D.

Gentlemen: The seed which I ordered from you is entirely satisfactory. Very truly yours, JOSEPH DOLEY.

Boyd, Ky.

Dear Sir: The seeds I got from you early in the spring were just fine. Truly yours, MRS. D. H. WOOLERY.

Anderson County.

Gentlemen: I received the seed I ordered from you and they are simply fine. I will send for more soon. Yours truly, J. CHRISTISON.

Culver, Ind.

Dear Sirs: I received the seeds I ordered from you and allow me to thank you for prompt attention. They are sure fine. Very truly,

IRA SPARKS.

Virgilina, Va.

Dear Sir: I have always purchased my seeds from you and have always been well pleased with the results obtained from them. I will send you my order for what seeds I need, as I know I will be sure to get what I want. Very truly,

B. ROYSTER.

Fredericktown, Mo.

Dear Sir: My old friend, T. A. Rose, of Knoblick, Mo., has told me of the splendid results he has had from seeds he has ordered from you. I want one of your seed catalogues, as I want nothing only good reliable seeds. Truly yours,

L. H. WATTS.

Guthrie, Okla.

Gentlemen: I have sent to you for my seeds for several years and have always had splendid success and results from them. I grow watermelons extensively for the market and I have never found any trouble selling my melons grown from seed that I get from you and shall hope to obtain the same good results from the seed I am sending for by this mail. Wishing you success and every good wish, I am, truly yours,

GILBERT KEMPLE.

Hester, Okla.

Gentlemen: Received the seeds by this morning's mail and they were of the very best quality. I will send you another order in a few days. Very truly,

MIKE O'DONNELL.

Germania, Iowa.

Dear Sir: I am sending you another order for seeds. Everything I ordered and received from you last year did splendidly, although I did not get them planted until late. However, they all grew rapidly and matured before frost. I am ordering celery seed and would appreciate your advice as to culture of same, as I have never grown it before. Very truly,

MRS. W. EVANS.

Alma, Mo.

Gentlemen: Have just received your seed catalogue. Many thanks for same. I have ordered and received my seeds from you for several years and they have always given us good satisfaction. We are now sending you another order for seeds. Please quote us the price on New Era Cow Peas, as we want to order thirty or forty bushels. Very truly yours,

C. BROCKHOFF.

Fredericksburg, Mo.

Gentlemen: I received my seed wheat in fine condition and am well pleased with it. Think it some of the finest wheat I have ever seen. Very truly,

W. CRAMER.

Dryden, Mich.

Dear Sir: I have just received the seed I ordered from you and am well pleased with them. Will send you my order when in want of anything in your line. Thanks for prompt attention.

FRANK BARTLETT.

Kendallville, Ind.

Dear Sirs: I want to tell you I have just received my delayed seed wheat in good condition and I am well pleased with it. I wish to thank you for your courtesy. Pardon me for doubting your reliability for a single moment. Very truly,

E. C. SMITH.

Caledonia, Mo.

Gentlemen: The seeds I ordered arrived safely and was all O. K. They were some of the best seeds I have ever seen. I thank you for the promptness given my order. Very truly,

DAVID HULL.

Pacomoke City, Md.

Gentlemen: Your favor enclosing check for settlement of railroad claim of \$16.70 received and in reply would say that I thank you very much for your effort in securing this for me, as it came in very good at this time. Should I need anything in your line this spring I shall send my orders to you. Truly,

J. A. LOYD.

Sorrento, Colo.

Gentlemen: Seeds at hand yesterday and checked over. Everything came as ordered and I am well pleased with them. Yours truly,

W. MURRAY.

Alphoretta, Ky.

Dear Sir: I received my seeds all O. K. and was well pleased with them. I could not ask for better. They were the best to be obtained. They arrived in good condition. Thanks for prompt attention. Very truly,

D. C. MAY.

Joliet, Ill.

Gentlemen: I bought seeds from you for several years and have always been well pleased with the results obtained, therefore, I am sending to you again this year for what seeds I need or want, as I am sure I will get the very best. Very truly,

H. WINKLER.

Pilot Grove, Mo.

Gentlemen: I received the seeds I ordered from you. They were all satisfactory. I want to tell of the experience I had from cabbage seed I purchased from you. I got 999 cabbage heads from 1,000 plants. I have always been well pleased with the results obtained from seeds purchased from you. Very truly,

J. BOODY.

Christine, Texas.

Gentlemen: Please send your seed catalogue, also a copy of your nursery catalogue. We have used your seeds when in other location and have always been well pleased with them, and would be glad to get in touch with you again, as we want to send you another order for seeds. Respectfully,

D. S. P. BLACK & SON.

Attractive Wholesale Price List

To Market Gardeners and Other Large Growers

Make up Club Orders of \$10, \$20 and \$50, and Buy at Wholesale Prices

I fully realize that market gardeners and truck growers require a special selected strain of seeds. In view of this I make it a specialty to grow and handle nothing for this line of trade except the best varieties of new crop grown seeds, all thoroughly tested before sending out—to see that all seeds show good strong germination and are true to name.

MANY VARIETIES OF SEEDS ARE SHORT THIS YEAR, and you will do well to order early and take advantage of our very low prices while you can.

Prices quoted are based on present crop on hand, which is sufficient under ordinary conditions. Should it be necessary, however, for me to replenish my stocks, or should there be any sharp fluctuations of the market there will accordingly be some slight variation in prices.

It is our purpose to protect, as usual, the thousands of our customers who look to us each season for their supply of seeds.

Asparagus

	¼ lb.	lb.
Columbian Mammoth White	\$0.10	\$0.35
Conover's Colossal	.10	.35
Palmetto	.10	.35

Artichoke

	oz.	¼ lb.	lb.
Large Green Globe	\$0.30	\$0.90	\$3.00
Brussels Sprouts			
Ratekin's Improved		.60	2.00

Broccoli

White Cape	\$1.00
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Beans

	½ bu.	bu.
Ratekin's Bountiful	\$2.75	\$5.00
Long Yellow Six Weeks	2.50	4.50
Refugee or 1000 to 1	2.25	4.00
Improved Earliest Valentine	2.00	3.75
Ratekin's Stringless Green Pod	2.75	5.00
Giant Stringless	2.60	5.00
Black Valentine	2.50	4.50
Improved White Navy	2.00	3.75
Ratekin's Kidney Wax	2.75	5.00
Davis White Wax	2.50	4.50
Improved Golden Wax	2.50	4.75
Wardwell's Kidney Wax	2.50	4.75
German Black Wax	2.40	4.75
Challenge Black Wax	2.50	4.75
Currie's Rust Proof Wax	2.30	4.50
Hodson's Wax	2.60	5.00
Pencil Pod Wax	2.60	5.00
Burpee's Bush Lima	3.25	6.00
Henderson's Bush Lima	3.00	5.75
Ratekin's Giant Potted Lima	3.25	6.00
King of the Garden Lima	3.00	5.75
Siebert's Extra Early Lima	2.75	5.50
Kentucky Wonder (Old Homestead)	2.40	4.75
Lazy Wife Pole—Special	2.25	4.00
White Dutch Case Knife	2.75	5.00
Red Speckled (Cut Short)	2.50	4.75
Horticultural Pole	3.00	5.75
White Creaseback	3.00	5.75

Beet

	½ lb.	lb.
Ratekin's Extra Early	\$0.50	\$0.90
Crosby's Egyptian	.35	.65
Extra Early Egyptian Blood Turnip	.35	.65
Early Eclipse	.35	.65
Extra Early Dark Beauty	.35	.70
Improved Blood Turnip	.35	.70
Half Long Turnip	.35	.70
Detroit Dark Blood	.35	.70
Market Gardeners	.35	.70
Edmond's Early Blood	.35	.70

Cabbage

	\$0.60	\$1.10
Ratekin's Washington Wakefield	\$0.60	\$1.10
Early Jersey Wakefield	.60	1.10
Early Jersey Wakefield, Ratekin's Special Strain	1.25	2.25
Early Winningstadt	.75	1.40
All Seasons	.70	1.30
Ratekin's All Head	.75	1.40
Surehead	.60	1.10
Ratekin's Autumn King	.75	1.40
Danish Ball Head	.80	1.50
Large Late Drumhead	.60	1.15
Copenhagen Market	1.25	2.25
Ratekin's Ideal	.90	1.60
Premium's Flat Dutch	.60	1.10
Ratekin's Drumhead Savoy	.50	1.00
Mammoth Red Rock	.90	1.75
Red Drumhead	.90	1.75

Cauliflower

	oz.	¼ lb.
Ratekin's Dry Weather	\$3.00	\$10.00
Ratekin's Selected Dwarf Erfurt	2.75	9.00
Early Snowball	2.75	9.00

Carrots

	½ lb.	lb.
Oxheart or Guerande	\$0.40	\$0.75
Danver's Half Long	.40	.75
Ratekin's Early Market	.50	.90
Chantenay Half Long	.50	.90
Early Scarlet Horn	.50	.90
Long Orange	.50	.90
White Vosges	.35	.65
Giant Belgium	.35	.65

Celery

	\$1.90	\$3.75
Golden Self Blanching	\$1.90	\$3.75
Golden Self Blanching (Private Stock)	3.00	5.50
White Plume	.90	1.75
Ratekin's Giant Pascal	.80	1.50
Golden Heart	.70	1.25
Kalamazoo	.80	1.50

Cucumbers

	\$0.25	\$0.45
Ratekin's Improved White Spine	\$0.25	\$0.45
Ratekin's New Crescent	.25	.45
Japanese Climbing	.30	.55
Improved Long Green	.25	.45
Davis Perfect	.30	.55
Klondike Famous	.25	.45
Boston or Jersey Pickle	.25	.45
Cool and Crisp	.25	.45
New Astro	1.25	2.45
Fordhook Pickling	.50	.90
Chicago Improved Pickle	.50	.90
Early Cluster	.30	.55
Early Frame	.25	.45

Sweet Corn

	Peck.	Bu.
Mammoth White Cory	\$1.00	\$3.50
Country Gentleman	1.10	4.00
Peep o' Day	1.00	3.50
Golden Bantam	1.25	4.25
Early Minnesota	1.00	3.50
Crosby's Early	1.00	3.50
Improved Stowell's Evergreen	.90	3.25
First of All	1.00	3.50
Improved Adams	.90	3.40
Moore's Early Concord	.90	3.40
White Mexican	.90	3.40

Egg Plant

	oz.	¼ lb.	½ lb.
Ratekin's Black Beauty	\$0.20	\$0.65	\$1.25
Improved New York	.20	.65	1.25
Early Long Purple	.20	.65	1.25

Kohl Rabi

	½ lb.	lb.
Early Purple Vienna	\$0.50	\$1.00
Early White Vienna	.50	1.00

Lettuce

	\$0.40	\$0.75
Ratekin's May King	\$0.40	\$0.75
Big Boston	.40	.75
Market Gardeners	.40	.75
Ratekin's Early Prizehead	.40	.75
Iceberg	.30	.50
Early Curled Simpson	.30	.50
California Cream Butter	.40	.75
Grand Rapids	.30	.50
Black Seed Simpson	.30	.55
Improved Hanson	.30	.50
Salamander	.30	.50
Tomhannock	.30	.50

Attractive Wholesale Price List

To Market Gardeners and Other Large Growers

Make up Club Orders of \$10, \$20 and \$50, and Buy at Wholesale Prices

Muskmelon

	1/2 lb.	lb.
Ratekin's Early Market	\$0.40	\$0.75
Burrell Gem	.25	.50
Jenny Lind	.25	.50
Paul Rose or Petoskey	.25	.50
Ratekin's Rockford	.30	.60
Extra Early Hackensack	.25	.50
Small Green Nutmeg	.25	.50
Emerald Gem	.25	.50
Improved Cantaloupe	.25	.50
Osage or Miller's Cream	.25	.50
Long Island Beauty	.25	.50
Admiral Togo	.25	.50
Hoodoo	.25	.50

Watermelon

	1/2 lb.	lb.
Tom Watson	\$0.25	\$0.50
Ratekin's Champion	.30	.55
Ratekin's New National	.30	.55
Sweet Heart	.20	.35
McIver Wonderful Sugar	.25	.45
Kleckley's Sweet	.25	.45
Kolb's Gem	.25	.50
Mountain Sweet	.25	.50
Phinney's Early	.20	.35
Seminole	.20	.35
Peerless or Ice Cream	.20	.35
Triumph	.20	.35
Monte Christo	.20	.35
Cuban Queen	.20	.35
Black Diamond	.25	.45
Cole's Early	.20	.35
Apple Pie	.25	.45
Pride of Georgia	.30	.55
Light Iceing	.25	.45
Gypsy or Georgia Rattlesnake	.20	.35
Dark Iceing or Green Mountain	.20	.35

Onion

	1/2 lb.	lb.
Ratekin's Red Globe (Special)	\$0.50	\$0.90
Ratekin's White Globe (Special)	.50	.90
Ratekin's Yellow Globe (Special)	.40	.75
The Alsa Craig	1.00	1.90
Mammoth Prizetaker	.50	.90
White Portugal or Silverskin	.60	1.10
Mammoth Silver King	.60	1.10
Yellow Globe Danvers	.40	.75
Australian Brown	.40	.75
White Bermuda	1.10	2.00
New White Queen	.65	1.25
Extra Early Bartletta	.65	1.25
Ohio Yellow Globe	.40	.75
Southport Yellow Globe	.65	1.25
Southport Red Globe	.40	.75
Large Red Wethersfield	.50	.90

Parsnip

	1/2 lb.	lb.
Ratekin's Improved Hollow Crown	\$0.30	\$0.50
Improved or Table Guernsey	.25	.45
Improved Half Long	.25	.40

Parsley

	1/2 lb.	lb.
Moss Curled	\$0.65	\$1.25

Pepper

	1/2 lb.	lb.
Mammoth Ruby King	\$1.00	\$1.90
Sweet Mountain	1.00	1.90
Large Bell or Bull Nose	.75	1.40
Chinese Giant	2.00	3.80
Red Cayenne	1.00	1.90

Peas

	1/4 bu.	bu.
Ratekin's New Wonder	\$1.80	\$6.00
Alaska	1.80	6.00
American Wonder	1.80	6.00
First and Best	1.65	5.75
Premium Gem	1.80	6.00
Nott's Excelsior	1.75	6.00
Everbearing	1.80	6.00
Gradus or Prosperity	2.00	7.50
Telephone	1.70	6.00
Mammoth Luscious Sugar	2.00	7.00
Improved Strategem	1.50	5.50
Champion of England	1.80	6.00
Bliss Everbearing	\$1.50	\$5.75
Yorkshire Hero	2.00	7.00
Tom Thumb	2.00	7.00
Marrowfat	2.00	7.00
Thos. Laxton	2.00	7.00
Horsford's Market Gardener	1.80	6.00
McLean's Little Gem	1.80	6.00
Alderman	2.25	8.00

Pumpkin

	1/4 lb.	lb.
Ratekin's Mammoth Prize	\$0.40	\$0.75
Japanese Pie	.30	.55
Early Sugar or Pie	.30	.55

Sweet or Sugar	.20	.35
Connecticut Field	.15	.25
Large Cheese Pumpkin	.15	.25
Yankee Pie	.20	.35
Mammoth Tours	.50	.90
Kentucky Field	.10	.20

Radish

	1/2 lb.	lb.
Iceicle	\$0.25	\$0.45
Improved Chartier	.25	.45
French Breakfast	.25	.45
Non Plus Ultra	.25	.45
Rosy Gem	.25	.45
Early Scarlet Turnip	.25	.45
Early Long Scarlet Short Top	.25	.45
White Strasburg	.25	.45
Early Fame	.25	.45
White Lady Finger	.25	.45
Scarlet Turnip White Tip	.25	.45
Cincinnati Market	.25	.45
Early Scarlet Olive	.25	.45
Black Spanish	.25	.45
Rose China Winter	.30	.50
Long White	.25	.50
California Mammoth White	.30	.55
Crimson Giant	.30	.55

Salsify

	1/2 lb.	lb.
Mammoth Sandwich Island	\$0.55	\$1.00
Wisconsin Golden	.50	.90

Spinach

	1/2 lb.	lb.
Victoria	\$0.15	\$0.25
Bloomsdale	.15	.25
New Zealand	.15	.35

Squash

	1/2 lb.	lb.
New Golden Hubbard	\$0.35	\$0.65
Early Bush Crookneck	.30	.50
White Bush Scallop	.30	.50
True Hubbard	.40	.75
Warty Hubbard	.40	.75
Blue Hubbard or Marblehead	.40	.75
Sibley or Pike's Peak	.35	.60

Tomatoes

	1/4 lb.	1/2 lb.	1 lb.
Ratekin's Magi Queen	\$1.25	\$2.25	\$4.00
Ratekin's Earliest	.60	1.10	2.00
Ratekin's Beauty	.75	1.25	2.50
Chalk's Early Jewel	.50	.90	1.75
Ponderosa	1.00	1.80	3.50
Spark's Earliana	.55	1.00	2.00
Livingston's Globe	.70	1.30	2.50
Livingston's Coreless	.70	1.30	2.50
Acme	.50	.90	1.75
June Pink	.50	.90	1.75
Matchless	.50	.90	1.75
Yellow Plum or Pear	.60	1.10	2.00
New Stone	.45	.80	1.50
Dwarf Champion	.50	.90	1.75

Turnip

	1/2 lb.	lb.
Extra Early Purple Top Milan	\$0.20	\$0.35
Early White Milan	.20	.35
Golden Ball or Orange Jelly	.25	.45
Purple Top Globe	.20	.35
Early Snowball	.20	.35
Purple Top Strap Leaf	.20	.35
Early White Flat Dutch	.20	.35
White Globe	.25	.45

Tobacco

	oz.	1/4 lb.
White Burley	\$0.20	\$1.00
Missouri Broad Leaf	.15	.75

Ruta Bagas

	1/2 lb.	lb.
Purple Top	\$0.20	\$0.35
Monarch	.20	.35
Improved American	.20	.35
White Sweet German	.20	.35
Carter's Improved Hardy Swede	.20	.35

Sweet Peas

	1/2 lb.	lb.
Blanch Ferry	\$0.40	\$0.75
Dorothy Tennant	.40	.75
Black Knight	1.00	1.75
The Marjorie Ratekin	1.00	1.75
Countess of Cadogan	.25	.45
Lady Penzance	.25	.45
Cardinal	.40	.75
Mont Blanc	.40	.75
Blanch Burpee	.40	.75
Dorothy Eckford	.40	.75
Emily Henderson	.40	.75
Countess Spencer	.80	1.50
Bargain Mixtures of Sweet Peas	.30	.55
Eckford's Hybrid, mixed	.40	.75

Have also large stocks of alfalfa, tall and meadow fescue, millet, cane, Kafir corn, broom corn, Johnson grass and other grass seeds.

Columbia Mammoth White.

Asparagus

CULTURE: Sow the seed 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 cover the transplanted beds with about four inches of manure. 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 throws up larger shoots and fully as many of them as Conover's Colossal, and requires no earthing up in order to furnish the white shoots so much sought after. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.

Conover's Colossal A mammoth green sort of the largest size and of good quality. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 15c; 1 lb., 40c.

Palmetto Mammoth in size, even and regular in growth and appearance. Usually ready for market before other varieties. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 20c; 1 lb., 50c.

Asparagus Plants Asparagus can be grown either from the seed or plants, but by growing from plants you get from one to two years' start and are more sure of a perfect stand. The plants should be set very early in the

spring, or else late in the fall. At our nurseries we generally plant in rows three feet apart, with the plants one foot apart in the row. Select good, rich soil, the richer the better. I can supply a goodly quantity of selected roots of my growing of any of the above named varieties. **PRICE:** By mail, postpaid, 35c per doz., \$1.25 per 100. By express, purchaser's expense, \$1.00 per 100, \$7.50 per 1,000.

Artichoke

* This vegetable is a great delicacy, highly valued in all parts of Europe, and also one of the most prominent table vegetables in California and other parts of this country. The scales and bottom of the flower are eaten either boiled or raw as a salad. The young suckers are sometimes tied together and blanched and served in the same manner as asparagus. The plants thrive best in deep, rich soil, where water will not lodge about them during winter. Plants are set in rows three feet apart and two or three feet apart in a row. The crowns should be covered with coal ashes in the winter to shed the water, and over these a good covering of leaves, held in place by a little earth or litter. When spring arrives remove the leaves, but do not disturb the coal ashes until signs of growth appear, after which the ashes should be spread out over the ground. Seeds may be sown in the hotbed same as the tomato and transplanted in May. It makes a good growth the first year and some flowers may be had in September, but the second year all plants will flower and continue to do so for years.

Large Green Globe The best variety for general use; buds large, scales green; very thick and fleshy. Pkt., 10c; oz., 35c; ¼ lb., \$1.00.
For Artichoke Roots the great hog fattener and corn saver, see farm seeds.

Brussels Sprouts

One ounce will produce about 3,000 plants. Of the cabbage family, producing numerous heads on the stem, of the most delicious quality, as well as cabbage-like head at the top. Use and cultivate the same as winter cabbage.

Ratekin's Improved An improvement on the standard American sort. It is thoroughly acclimated; dwarf, robust habit; will endure the climatic changes better than the foreign sorts, and much freer from mildew and aphids. Pkt., 5c; oz., 15c; ¼ lb., 50c.

Bore Cole---See Kale

Broccoli Growth and habit like the cauliflower, except that it is more hardy, and the heads are not as compact. It is not desirable in warm or dry countries, but is of special value in the North. Cultivate and use the same as cauliflower.

White Cape **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 50c.

Ratekin's Bountiful Bean I consider this the best and most profitable green pod bush bean grown, and urge all my customers to give it a careful and thorough trial. See description and prices on next page.

"Vegetable Gardening," BY SAMUEL B. GREEN. A manual on the growing of vegetables for the home use and the market, treating on the rotation of crops, garden tillage, implements, seed growing, green houses, insects injurious to vegetables, methods of destroying them, garden herbs with a complete classification of vegetables. This book is thorough, practical and a comprehensive guide to vegetable gardening and **SHOULD BE IN THE HANDS OF EVERY FARMER OR GARDENER.** 265 pages, fully illustrated, 50c.

OUR SPECIAL OFFER: I will give one copy of this book free upon request with every order for garden seeds in the packet, ounce and ¼ lb., amounting to \$2.00 or more. Get your neighbors to send along their orders with you and obtain a copy of this valuable book **FREE.**

This offer does not include any previous discount or premiums, and is only good for orders for seeds in the packet, ounce and ¼ lb.

Gentlemen: I take great pleasure in informing you that the Columbia Mammoth White Asparagus that I procured from you is doing exceptionally well. It is the very best flavored asparagus I have ever tasted, and remains tender much longer than the ordinary varieties. Yours truly,
CHAS. WATSON.
Watertown, Mass.

Ratekin's
Bountiful.

SEE SPECIAL PRICES AND RATES ON SEEDS IN PACKETS ON PAGE 85; ALSO COLLECTIONS OF VEGETABLE AND FLOWER SEEDS ON PAGES 85-86.

Bush or Snap Beans---Green Podded

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 my personal opinion that there is really very little difference in flavor, yield, earliness, hardiness 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 pint, pint and quart are delivered post paid. Persons ordering by express, not prepaid, may deduct 8 cents per pint or 15 cents per quart from these prices quoted. Prices by the peck or bushel do not include delivery, but must be sent by express, not prepaid.

(One quart will plant 100 feet of drill).

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 succession until August. Rows may be made two feet apart, and the beans planted a few inches apart in drills, or three to four beans in hills six to eight inches apart. Cultivate and hoe frequently, always, however, when the vines are perfectly dry. In hoeing draw the soil up towards the rows or plants.

NOTE—There are so many different kinds of beans that it is hard to tell just which are the best. I have selected those varieties which my customers like best, and will describe how they acted at the trial grounds.

Bountiful. (See cut on previous page). I have been growing this bean for several years now, and consider it by far the best early bean on the market. The plant is of remarkably handsome and thrifty growth, being practically mildew and rust proof. It is very hardy, extremely early and a heavy bearer. In the trial grounds it was the first to give pods fit to pick in the spring and the last to yield edible pods in the fall. In fact, early frost usually finds midsummer plants still in pod and blossom. Moreover, the pods are absolutely stringless and free from that tough lining not only when young, but this tender snap, brittle quality is retained even into maturity. The pods are of large size, broad, flat, extra long, very uniform in shape, solid, meaty and of delicious flavor. Greatly in demand in all Eastern markets, and will prove a money-maker to the gardeners of the West. I urge all my customers, especially market growers, to plant heavily of this variety.

PRICE: Pkt., 10c; pt., 35c; qt., 65c. Your expense $\frac{1}{2}$ pk., \$1.25; pk., \$2.00.

Improved Earliest Valentine.

excellent table qualities, but a little too late for first market. It is the variety that is almost always used by the canning factories. **PRICE:** Pkt., 5c; pt., 20c; qt., 35c; pk., \$1.75.

Improved Earliest Valentine My improved strain of this famous old reliable green podded bush bean is ready for basket in thirty-five to forty days. As now perfected it has full, meaty round pods, which possess beauty, tenderness and a superb flavor. It is an ideal snap short bean, and one that always sells well on the market. Vines grow about fifteen inches high. My Earliest Improved is a great improvement over the original Red Valentine, and I count it equal to Bountiful as a market bean, the only difference in value being that Bountiful is flat, while Improved Earliest Valentine is round. **PRICE:** Pkt., 5c; pt., 20c; qt., 35c; pk., \$1.50.

Ratekin's Stringless Green Pod Bush This bean, while not so well known as Valentine, is bound to rank high with those who plant it. The pods are somewhat larger, round, fleshy and nearly straight. They average five inches in length, rich green in color, very tender and of fine flavor. One of the very best of green pods for home use and a good market sort. **PRICE:** Pkt., 5c; pt., 20c; qt., 40c; pk., \$1.75.

Giant Stringless Bean If you want a truly mammoth green pod bush bean Giant Stringless will fill the bill. The pods are one-third larger than Valentine, round, full and fleshy. It is not quite as early or prolific as some of the above named varieties, but is a splendid garden variety for second early or succession. **PRICE:** Pkt., 10c; pt., 30c; qt., 50c; pk., \$1.50.

Black Valentine A very hardy and productive green-podded bush bean, with a strong, vigorous bush. Ready for picking about the same time as my Earliest Improved Valentine, and produces its round pods much longer, straighter, but less fleshy. It is very handsome, solid, tender and of fine flavor. Very popular in the South on account of its blight resisting qualities; a long distance shipper. Grown extensively by market gardeners. **PRICE:** Pkt., 5c; pt., 20c; qt., 35c; pk., \$1.50.

Yellow Six Weeks.

Long Yellow Six Weeks. This is a favorite with all gardeners. The green pods are flat, thick and meaty, and the seeds, when ripe, are yellow. Hence the name. It is a very early variety, but at the trial grounds was slightly tough and not as tender as Bountiful. **PRICE:** Pkt., 5c; pt., 25c; qt., 40c.

Refuge or 1000 to 1. This bean is very popular in many sections and is one of the best for main crop. Pods are tender and have

Ratekin's Stringless Green Pod Bush.

Bush Beans---Wax Sorts

Ratekin's Kidney Wax. I have realized the importance of a pure white tender bean for canners' purposes, and in the Ratekin's Kidney Wax I believe I 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 quantity and quality, 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:** Pkt., 5c; pt., 20c; qt., 40c; pk., \$2.00.

Davis White Wax. A very showy variety, and is largely grown for shipping and for the canning factories. The pods are a clear white color, plump, full and entirely 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 Ratekin's Kidney Wax. **PRICE:** Pkt., 5c; pt., 25c; qt., 45c; pk., \$1.75.

Improved Golden Wax. In spite of all the new sorts of beans being introduced every year our Golden Wax Bean still retains its popularity. This is a decided improvement on the old Golden Wax, as it is almost wholly free from rust. The pods are of a dark rich golden yellow color and of per-

Golden Wax.

fect shape. Cooking quickly as snaps, shelling well when green and of highest quality in either way. **PRICE:** Pkt., 5c; pt., 25c; qt., 45c; pk., \$1.75.

Wardwell's Kidney Wax. Many progressive gardeners will have no other than Wardwell's Kidney Wax Bean. In the South, especially, an enormous acreage is annually planted with great profit to the grower. It is one of the best, earliest and hardiest of the wax sorts. I cannot recommend it too highly to market gardeners as a favorite for shipping.

PRICE: Pkt., 5c; pt., 20c; qt., 35c; pk., \$1.50.

Wardwell's Early Kidney Wax.

German Black Wax.

I am now so thoroughly satisfied with this improved strain of Black Wax that I have discarded the old stock altogether; this being more vigorous and far more productive with length, borne well up among the foliage, thick, fleshy and of a clear, waxy white color. Remains a long time in condition for use as snaps. Beans small, oblong and jet black. **PRICE:** Pkt., 5c; pt., 20c; qt., 35c; pk., \$1.50.

Dear sir: Beans are a sort of hobby with me, and I take keen delight in growing improved varieties, both for home use and the market. Last season I tried your Improved Golden Wax with splendid results. The neighbors all envied my garden planted with your seeds, and I wish to thank you for the extras included in the order. Yours, C. V. Blackburn, Springfield, Ill.

The Bush Limas are a comparatively new class of Lima Beans that are becoming very popular. They are the true bush form, growing from 15 to 25 inches high, and are fully two weeks earlier than the climbing Limas. There are many varieties of Lima Beans, but I am listing only those sorts that have made good at the trial grounds. These beans are good for shelling green for succotash and the like; also for dry beans for winter.

Burpee's Bush Lima. A dwarf or bush form of the large climbing Lima. The pods and seeds are of full Lima size. The seed which I grow is of uniformly dwarf or bushy habit, growing 18 to 20 inches high, with an erect branching stem. The size and luscious flavor of the bean are exactly the same as with the climbing Lima type. Sow in rows three feet apart and thin to 18 or 20 inches. PRICE: Pkt., 5c; pt., 25c; qt., 45c; pk., \$1.50.

Henderson's Bush Lima. The best and earliest of all Limas. It is small in size, but of high table merit and in favor with all housekeepers. It is wondrously prolific and just the thing for a family garden. A package or a pint will furnish sufficient for a good sized family. It is one of those beans hard to improve upon. PRICE: Pkt., 5c; pt., 25c; qt., 45c; pk., \$1.75.

Dear Sir: I am pleased to report that your Ratekin's Giant Podded Lima is all you claim for it—a very vigorous grower and a heavy yielder. I am well pleased with the seeds bought from you last spring. Respectfully yours, Mrs. L. E. Moffit, Galveston, Texas,

Messrs: Kindly quote me prices on your Giant Podded Lima and also King of the Garden Lima in five bushel lots. I was so well pleased with the seeds I procured from you last spring that I desire to obtain my whole supply from you this year. Yours very truly, C. E. Gasconade, Greensboro, N. C.

Burpee's Bush Lima.

Pole or Climbing Limas

Ratekin's 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 ten to twelve feet, excelling in this respect all other Limas. I 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: Pkt., 10c; pt., 35c; qt., 60c; pk., \$2.00.

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: Pkt., 5c; pt., 30c; qt., 50c; pk., \$1.75.

Sieva Lima. (The Butter Bean of the South). Grows quickly, matures early, and is immensely productive, bearing continually throughout the season. A fine early sort. PRICE: Pkt., 5c; pt., 25c; qt., 45c; peck, \$1.75.

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 two ounces and will plant fifteen to twenty hills. A pint will plant about 100 hills.

Pole Beans GREEN AND WAX PODDED. The beauty of the pole beans and keep on bearing all fall. Many of the varieties of the highest quality can be had only in the pole form. They can be used either as green beans to cook, pod and all, or they may be left for shell beans.

Kentucky Wonder or Old Homestead. I believe that this is the very best pole bean grown, whether you get your seed of me or from some other reliable seedsman, just so you get the true seed. It has a long, very wrinkly pod, flat and tender, hanging in great clusters from the top to the bottom of the pole. Pod is light green and bean is brown in color. This is the best and most profitable bean for the market gardener, the pods being so showy and producing so abundantly. PRICE: Pkt., 5c; pt., 20c; qt., 35c; pk., \$1.60.

Lazy Wife Pole Bean The green pods are wonderfully broad, thick, fleshy, and, above all, absolutely stringless. They retain their rich, stringless and tender qualities until they are ripe, so much, in fact, that I am safe in saying that Lazy Wife is the very best of all snap sorts. The pods are 6 to 8 inches long, exceedingly rich and fine flavored. This is an excellent sort, and sure to give satisfaction, especially in the South. PRICE: Pkt., 5c; pt., 20c; qt., 35c; pk., \$1.50.

White Dutch Case Knife This variety yields an immense crop of handsome flat white beans of excellent flavor. Cooks easily. PRICE: Pkt., 5c; pt., 20c; qt., 35c; pk., \$1.60.

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: Pkt., 5c; pt., 20c; qt., 35c; pk., \$1.60.

Horticultural Pole Bean This is one of the old favorites, and sometimes called the "Bird Eye" Bean; also "Cranberry." The mammoth pods are beautifully striped and splashed with brilliant carmine; very showy and attractive. The beans are large, a rich flavor and fine for shelling. PRICE: Pkt., 5c; pt., 20c; qt., 40c; pk., \$1.75.

Beets

I have taken great pains to procure the very best beet seed to be had, and a crop grown from my seed will prove it. My seed is all grown for me by a specialist in Germany, and is absolutely true. The seed forms beets of uniform shape and color, small tops and small tap roots, nearly free from fibrous or sprangly roots. The crop is very short this year, shorter even than last year, consequently prices are higher. Put your order in early. Remember that beet seed must be sown early, as it comes best when the ground is cool. Many fail to get a stand on account of too late a sowing and then blame the seed.

CULTURE: The best results are obtained on a deep, sandy loam. For general crop sow as soon as the ground will permit in drills eighteen inches apart, and thin out three 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 out doors 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. One ounce sows fifty feet of drill; four or six pounds for one acre.

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Ratekin's Extra Early I consider this variety the very earliest of all beets. It is of fine globular form, has sweet, tender flesh of alternate rings of light and dark pink. The light green leaves are sometimes used for greens. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Crosby's Egyptian The name of this variety is misleading, as it resembles the Egyptian only in its extreme earliness. It is larger, lighter colored and more spherical, one of the best for early planting out of doors. It is an excellent sort, and one which will stand a trial in every section. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 90c.

Crosby's Egyptian.

Beets

Extra Early Egyptian Blood Turnip.

One of the best forcing varieties and excellent for early crop out of doors, being very early, with small top. Roots very dark red, flat on top, but flat beneath, with very small tap roots; flesh dark red, zoned with lighter shade, hard, crisp and tender when young, but becoming woody with age. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Early Eclipse.

Tops small, purplish green, shading to lighter color on outside of leaves. Roots nearly globular, with small tap root and very small collar. Flesh dark red, zoned with a lighter shade; very sweet, crisp and tender, especially when young. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 90c.

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: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 95c.

Improved Blood Turnip.

Popular everywhere; roots fine; symmetrical in shape; flesh deep blood red, tender and sweet; grows to good size; fine for early use and desirable for winter. PRICE: Pkt., 5c; 1 oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

Half Long Blood.

An excellent sort for winter use. Roots not as long as the "Long Smooth," but considerably thicker, always smooth and handsome. Flesh sweet, tender and of dark red color. An excellent keeper. PRICE: Pkt., 5c; 1 oz., 10c; ¼ lb., 30c; lb., \$1.00.

Detroit Dark Blood.

A most excellent turnip rooted sort. It grows to a large size, is of most handsome appearance, and is very productive in all soils and locations and in all seasons. Leaf, stems and veins are dark red, blade green, roots globular, perfectly smooth, dark blood red. Flesh bright red, zoned with a darker shade, very crisp, tender and sweet, remaining so a long time. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

NOTE—FOR MANGELS AND SUGAR BEETS FOR STOCK FEEDING, SEE FARM SEEDS DEPARTMENT.

American Grown

Cabbage

Highest Quality

I pride myself on having the best, purest and highest grade Cabbage Seed that is offered or at least it is surpassed by none. Compared with the cost of seed there is more money in growing cabbage than in any other crop, and there is nothing that growers should be more particular about than the seed selection. My seed is all tested for germination and purity, and is of the very best.

SOW ONE OUNCE FOR 3,000 TO 4,000 PLANTS; FOUR OUNCES FOR ONE ACRE.

CULTURE: For plants of the earliest sorts sow seed in January or February under glass, and pick out in flats or frames about two inches apart each way. Transplant to open ground as soon in spring as the land can be properly prepared. A rich, warm, fibrous loam is best. Have the plants in the rows 20 to 24 inches apart, and rows at least two feet apart. Give thorough cultivation, and irrigate in dry weather if practicable. Protect against the ravages of cutworm, maggot and green worm. A little nitrate of soda applied around the plant is of great benefit. Potash applications, such as wood ashes or muriate, may also do much good. For late cabbage plants sow seed in drills in open ground during April and May, and transplant in June and July, giving the plants more room than allowed for earliest cabbages. Dusting with tobacco dust, insect powder, etc., or splashing with hot soapsuds, especially whale-oil soap solution, are good and safe remedies for some of the insect pests attacking plants of the cabbage.

Ratekin's Washington Wakefield Cabbage.

(Early). I introduced this cabbage in 1893, at which time my stock was limited. I received so many letters of praise and congratulations regarding it that it seemed as though everyone who tried it must have written to make known their satisfaction. All gardeners are so familiar with Wakefield Cabbages that description is unnecessary. The engraving shows the character of the Washington Wakefield. 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: Large pkt., 5c; oz., 10c; ¼ lb., 50c; lb., 75c; No other cabbage of which I have knowledge has aroused such enthusiasm among cabbage experts as has my Washington Wakefield.

Early Jersey Wakefield The earliest and hardest heading of extra early cabbages. Our seed is new and good. Heads conical, compact, solid and of excellent quality. The thick, stout leaves and compact habit makes it the best for wintering over and very early setting. PRICE: Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$1.60.

Gentlemen: The seeds procured from you proved to be of the very best quality. The Washington Wakefield Cabbage was especially fine. I shall want more seed next year and will send to you. Yours truly,
MRS. S. GIBSON,
Jefferson City, Mo.

Dear Sir: I am pleased to report that the seeds purchased from you last spring were entirely satisfactory. The Wakefield Cabbage was especially fine. Yours truly,
MRS. ROGER TURNBALL,
Waco, Texas.

Cabbage

Ratekin's Special Strain 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. I 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:** Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.75.

Early Winningstadt

One of the best for general use, being very hardy and sure to head, forming a hard head when most sorts fail. Those who have failed with other kinds can hope to succeed with this. It seems to suffer less from the cabbage worm than any other sort. Plant very compact, with short, thick leaves. Heads regular, conical, very hard, and keep well both summer and winter. **PRICE:** Pkt., 5c; oz., 20c; 2 oz., 35c; $\frac{1}{4}$ lb., 40c; 1 lb., \$1.50.

All Seasons This is generally grown on Long Island for the New York market. Heads very large, round, often nearly spherical, but usually

somewhat flattened; very solid and of the best quality, keeping as well as the winter sorts. Plants very vigorous and sure heading; leaves large, smooth, with dense bloom. Remarkable for its ability to stand the hot sun and dry weather. Our trial has shown that heads which were fit for market by July 10th were still salable September 10th, the only change being increased size and density. One of the very best sorts for general cultivation. **PRICE:** Pkt., 5c; oz., 20c; 2 oz., 35c; $\frac{1}{4}$ lb., 50c; lb., \$1.50.

Ratekin's All Head **THE EARLIEST OF ALL LARGE CABBAGE,** and considerably larger than any other early summer variety that is equally as early. The deep, flat heads are remarkably solid and the most uniform in color, form and size of any variety. 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:** Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 75c; lb., \$2.50

Surehead A popular sort for main crop; never fails to form uniformly large and solid heads, which are tender and of fine, sweet flavor. An excellent keeper and a good shipper. **PRICE:** Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 60c; lb. \$1.75.

Ratekin's All Head.

Ratekin's Autumn King

"AUTUMN KING" is an entirely distinct variety; best keeper we have ever seen; it produces enormous solid heads of that dark shade of green that is most desirable in a cabbage, and has such small outer leaves that it can be planted closer together than the ordinary late sorts, and can be relied on to produce a greater weight of crop per acre than any other variety. A distinct feature of the "AUTUMN KING" is the peculiarly crimped leaves, which not only adds to its appearance, but enables it to be distinguished anywhere. It is unquestionably one of the best late sorts of today. **PRICE:** Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.60.

Danish Ball Head This winter variety is especially desired on account of its great solidity and its keeping qualities. They weigh more than other sorts of equal size. The heads are crisp, tender and sweet and unsurpassed for boiling, slaw, sauer kraut, etc. It grows well on all soils and under most conditions, withstanding hot, dry weather, and does not rot in wet seasons. **PRICE:** Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 75c; lb., \$2.25.

Large Late 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:** Pkt., 5c; oz., 20c; $\frac{1}{4}$ lb., 50c; lb., \$1.60.

Autumn King.

Messrs: I am pleased to report that the cabbage seed purchased from you last spring grew fine and that I had early cabbage ten days before any of my neighbors. Yours very truly,
Chas. Mendenhall,
Atchison, Kan., Nov. 11.

Copenhagen Market

Offered Last Year for the First Time.
It Proved to Be the Best Early Cabbage from Denmark.

Copenhagen Market is certainly a valuable new, early cabbage, producing round, hard heads very early in the season. As early as the Charleston Wakefield. It is the most popular early cabbage in the markets of Copenhagen. Market gardeners here who tried it for the first time last season are simply crazy about it on account of its extreme earliness and solid ten-pound heads, with a small core and always of excellent quality. The plants are short stemmed, producing heads almost on the ground. The light green colored leaves are medium in size, saucer shaper, and are always tightly folded. The plants may therefore be set closer than most other early varieties. It is a vigorous grower and yielder, as are all cabbages from Denmark, and an excellent keeper. My stock of Copenhagen Market comes to me direct from the originator. My supply is limited to a little over 100 pounds. PRICE: Pkt., 10c; ½ oz., 35c; oz., 60c; ¼ lb., \$1.75; lb., \$6.00.

Ratekin's Ideal Cabbage. As now improved the most profitable cabbage ever offered to the American cabbage grower. Absolutely sure heading; 999 out of 1,000 plants make perfect, saleable heads, averaging sixteen to twenty pounds; interior is creamy white, compact and crisp, unequalled for cooking or slicing; flavor especially fine. It is without exception the best winter keeper in the world. It will flourish on all soils. In fact, it will prove a gold mine to all cabbage growers. We want every one of our customers to give it a trial this season. The seed from these we offer you cannot be equalled. PRICE: Pkt., 5c; oz., 5c; ¼ lb., 45c; ½ lb., 80c; 1 lb., \$1.60, postpaid.

Premium Flat Dutch. The best "FLAT DUTCH CABBAGE" ever offered the American cabbage grower. Absolutely sure heading. Specially grown heads often reach fifty pounds each. Interior is creamy

Ratekin's Ideal Cabbage.

white, compact and crisp. Unequalled for cooking or slicing; flavor especially fine. It will flourish on all soils. PRICE: Pkt., 5c; oz., 15c; ¼ lb., 50c; ½ lb., 90c; lb., \$1.60.

The most critical cabbage grower in the land need have no doubts about the quality of our cabbage seed.

Ratekin's Drumhead Savoy.

This is the hardest heading and best all-round Savoy. Plants are of strong growth, having only a moderate number of outer leaves growing closely about the large, solid round heads. Heads beautifully blanched and of the finest flavor. PRICE: Pkt., 5c; oz., 20c; ¼ lb., 50c; lb., \$1.60.

Ratekin's Drumhead Savoy.

Premium Late Flat Dutch.

Ratekin's Dry-Weather Cauliflower.

Cauliflower

CULTURE: The same as for cabbage, except that extra mixture and plenty of water will pay upon Cauliflower. If the soil be dry water frequently, and if the plants could have a heavy mulch of hay or straw it would keep the soil moist, and they would not suffer from drouth. The early kinds should be strong enough to plant out not later than the middle of April. The late kinds may be planted out same time as cabbage.

Ratekin's Dry-Weather Cauliflower

Especially adapted for sections subject to long dry seasons, as it will grow well and produce the finest heads in spite of lack of moisture. Heads grow to a large size, are very solid, pure white and of delicious flavor. Valuable for growing in the Southern States. Pkt., 10c; ¼ oz., 75c; ½ oz., \$1.10.

Ratekin's Selected Dwarf Erfurt

One of the earliest in cultivation; small-leaved dwarf, producing very solid, pure white heads of the finest quality. It grows about fifteen inches high, and is a sure leader. Pkt., 10c; ¼ oz., 75c.

Early Snowball

An extremely early dwarf variety, producing magnificent white heads of fine quality. Well adapted to hot-bed culture. Pkt., 10c; ¼ oz., 75c.

Carrots

CULTURE: While a sandy loam, made rich by manuring the previous year, is the best for the carrot, any good land, if thoroughly and deeply worked, will produce satisfactory crops. When it is possible to do so it is advisable to sow as early in the spring as the ground is fit to work, though good crops may in this latitude be grown from sowing as late as June 15, but success from such late planting is uncertain. For table use sow the smaller kind as early as practicable in rows 15 to 18 inches apart. For field culture prepare the ground thoroughly and sow in drills 18 to 24 inches apart, using from 1½ to 3 lbs. to the acre, according to the distance between the rows. Cover one-half to one inch deep and see to it that the soil is pressed firmly above the seed. As soon as the plants appear use the cultivator or wheel hoe. Do not let the weeds get a start. Thin the smaller table sorts to eight to ten to a foot, and the field varieties to 3 to 6 inches apart in the row. For winter use gather and store like beets or turnips.

Oxheart or Geurande

We do not hesitate to call this the most valuable. It is of beautiful shape and rich orange color. It will produce roots as early as any variety and continues of the best quality all the season. It is excellent for hogs and other live stock, and has yielded 1,200 bushels per acre. Cut off tops with scythe and pull roots with potato hooks. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

Danver's Half Long

A popular, standard variety of rich, dark orange color. Very smooth and handsome. In form half way between Oxheart and the Long Orange, and wonderfully productive. Under special cultivation it has yielded from twenty to twenty-five tons per acre. One of the finest varieties in cultivation. PRICE: Pkt., 5c; 1 oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

Ratekin's Early Market

Stump rooted, grows about the size of our Cincinnati Market Radish, excellent forcer; fine flavor; flesh a deep orange, fine grained. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

Chantenay Half Long

Medium early, roots smooth, bright orange and of fine quality. An excellent market sort. Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

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: Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.10. NOTE: For stock carrots see farm seeds.

CHUFAS OR EARTH ALMOND

A nice little ground nut which is greatly liked by the children. In sweetness and flavor they resemble the cocoanut or almond, and are considered very nice put on the table in a fruit dish with candies, and as an after dinner relish. Very prolific, a single one yielding from two to four hundred. The nuts grow under ground, very near the surface, easily reached by pigs and poultry, and destroyed by them if they have free access. Plant in April, ten inches apart in 2¼-foot rows. Cover them lightly. If the seed is very dry soak them well before planting. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; 1 lb., 60c.

CRESS

Early Curled

Well known salad. Sow at intervals all season. Pkt., 5c; oz., 10c; ¼ lb., 35c; 1 lb., \$1.10.

Danver's Half Long.

Ratekin's Early Market.

Celery

CULTURE: Sow the seed in a light, rich, dry border as early as the ground can be worked in drills eight to ten inches apart, and cover the seeds about a quarter of an inch deep, rolling or treading them in if the ground be dry. When fairly out of the seed-leaf they may be transplanted to another bed, or they may be thinned out to six or eight inches apart, and let grow until wanted to plant out in beds or trenches. The beds should be kept well weeded, and occasional soaking with water in dry weather will do the plants good. Early in July in the North, a month or six weeks later in the Southern States is the proper time to set the plants out in beds or trenches. Press the soil firmly against the roots. In the garden the better way is to set the plants in shallow trenches. We say shallow, for it is obviously a bad plan to remove all the good soil (as must be done in a deep trench), and put the plants in that which is poor. The plants must be set in a single row in a narrow trench; or the trench may be made into a bed wide enough to hold two, three or four rows, and in this case the plants are in a compact form to be covered for the winter where they grow. This will save much labor where there is no root-cellar for storage, as often happens to be the case. When grown in beds in this way the rows should be one foot apart, and the plants about eight inches apart in rows. The bed should be made very rich with thoroughly decomposed manure. The plants will need to be earthed up two or three times, and in doing this care should be taken not to let the earth get into the heart of the plant. In field culture the plants are set on the surface in rows four feet apart when the celery is to be earthed up in the field for early use, and two feet apart when the plants are to be taken up and blanched in the cellar for winter use. The plants are set six inches apart in rows. If not grown in beds the best way to store is to dig trenches in a well-drained spot in the open ground one foot wide, and at a depth of a few inches less than the height of the celery. The plants are then lifted and set close together. When severe cold weather comes on cover gradually with leaves, hay or straw, and place boards on top. The turnip-rooted or "Knob" Celery needs no earthing up, and may be planted in rows one foot apart.

Golden Self-Blanching.

This is without doubt the most popular celery grown. It is a SELF-BLANCHING sort, for with a little banking up or covering even 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.

RATEKIN'S "PRIVATE STOCK," and "REGULAR" stock, and for the following reason: Some years ago I 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, for it did not blanch as well as usual, nor was the seed as pure. My customers, of course, noted the difference in the quality between the French stock and the California stock, and have always since insisted on having our French grown "PRIVATE STOCK" seed, no matter what the difference in price might be. In fact, I have on several occasions, when the particular French stock of seed I mention was very scarce and high in price sold it readily at from \$15.00 to \$25.00 a pound, when I was only asking \$3.00 a pound for the very best California seed.

Ratekin's Private Stock.

PRICE: Large pkt., 15c; oz., 50c; ¼ lb., \$1.75; lb., \$6.00, postpaid.

Regular Stock. PRICE: Large pkt., 5c; oz., 20c; ¼ lb., 55c; lb., \$2.00, postpaid.

White Plume

Stalks, portions of the inner leaves and heart naturally white and become 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: Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Ratekin's Giant Pascal

Stalks remarkably large, thick, solid, entirely stringless, very crisp and brittle. A vigorous grower and is self-blanching, clear white. PRICE: Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.50.

Corn, Sweet or Sugar

CULTURE: Plant in hills three feet apart each way, and five or six kernels in a hill. Hoe often and draw soil up to the stem; break off side shoots. Make the ground rich with well-rotted manure. If sown thinly in drills a greater yield from a given surface will be obtained. Prices quoted on sweet corn by the packet, pint and quart are postpaid.

Sweet corn is one of my specialties. Like field corn I grow it on a large scale, and supply the most reputable seed houses in the country with their seed. Good sweet corn seed requires the most careful attention, especially during the drying season when the corn is cured. I cure all my seed by a natural process, using no artificial heat whatever, and seed procured from me can be depended upon to grow from 90 to 95 per cent strong. Market gardeners and growers who require seed absolutely true and of good, even grade should write me before ordering.

Mammoth White Cory.

The largest and best extra early sweet corn. The stalks are no larger than those of the "White Cob Cory," but each stalk furnishes two or more large, fine shaped ears, very symmetrical and handsome, with no opening between the rows at the base. The grain is large, broad, very white and of remarkably good quality for such an early sort. The beauty and quality of this variety give it ready sale, even when the market is overstocked. PRICE: Pkt., 10c; qt., 30c; 4 qts., \$1.00.

Country Gentleman.

This variety is often called the "shoe peg" corn, owing to the arrangement of the crowded kernels which are long and very sweet. The ears average nine inches in length and are borne from two to five and sometimes six on each stalk. The cob is small and very closely packed from tip to butt with slender, pure white kernels of the finest quality. If you try this variety you will like it. Pkt., 5c; qt., 15c; qt., 30c; 4 qts., \$1.00.

Country Gentleman.

Golden Bantam.

of years to improve it for family use. The ears are medium to large size, and our illustration was made by combining the picture of the lower part of an ear in fit condition for table use with part of an ear of dry seed corn. The grains are deep, exceptionally tender and remain a long time in an edible condition. The dried kernels are shriveled so much that they readily show its unusual sweetness. PRICE: Pkt., 5c; ½ pt., 15c; qt., 45c.

First of All. The Best Extra Early Market Sort. It is the earliest table corn, and brings double the price that better corns command later. PRICE: Pkt., 10c; pt., 20c; qt., 30c; 4 qts., \$1.00, postpaid.

Pop Corn

BIG MONEY IN LITTLE THINGS.

Very often there is good money in "little things" which, because they are small people are likely to overlook. Popcorn is one of these.

Boys or girls can grow an acre or two of popcorn and dispose of the product to their neighbors or to the merchant. There is usually a demand for this article and in this way considerable money can easily be earned. Why not plow up an acre or two and turn it over to the children. It will afford them pleasure and profit.

White Rice. A very handsome and prolific variety; ears short; kernels long, pointed and resembles rice; color white. Probably no variety of popcorn is superior to this for parching. PRICE: Pkt., 5c; pt., 20c; qt., 35c, postpaid; pk., 85c, by freight or express.

Queen's Golden. Color a peculiar lustrous golden yellow; pops to a rich cream color; very prolific. PRICE: Pkt., 5c; pt., 20c; qt., 35c, postpaid; pk., 85c, by express.

New Red Beauty. A valuable new rice popcorn, introduced by an extensive popcorn grower in Illinois. Ears medium to large; color bright red; deep grains and small cob; extremely early and productive. Highly recommended. PRICE: Pkt., 5c; ½ pt., 10c; pt., 20c; qt., 35c.

Sweet Corn

Peep O'Day. Originating in the far north this variety is therefore extremely early in maturing. Besides this very important feature it is a "Sweet Corn" in the true sense of the word, being remarkably sweet and tender. The stalks grow about three 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: Pt., 20c; qt., 30c; 4 qts., \$1.00.

Golden Bantam. Is becoming each year more firmly fixed in popular favor because of its extreme early character, vigorous growth and surpassingly delicious flavor. We have had hundreds of letters from customers, giving it the highest praise as the finest extra-early sweet corn they have ever grown.

Although the dry grain is entirely free from any flinty glaze it is exceptionally hard and firm, hence can be planted earlier than any other true Sweet Corn. The stalks are dwarf and sturdy in habit, growing to a height of four feet. They bear two and three good ears, which are set well above the ground. The ears, five to seven inches in length, have eight rows of broad, yellow grains, extending to the extreme rounded tip.

Many market gardeners report that they find GOLDEN BANTAM their most profitable variety throughout the season (from successive plantings), as soon as customers become acquainted with the splendid flavor and distinct color.

GOLDEN BANTAM 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: Pkt., 5c; ½ pt., 15c; qt., 30c; 4 qts., \$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: Pkt., 10c; ½ pt., 15c; qt., 30c.

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: Pkt., 5c; ½ pt., 10c; pt., 20c; qt., 35c

Improved Stowell's Evergreen.

For many years Stowell's Evergreen Corn has been the most prominent main crop variety and is more largely planted than any other, being a general favorite with canners and market gardeners for late use. We have been selecting this for a number

IMPROVED STOWELL'S EVERGREEN.
The Best Main Crop Sweet Corn.

Cucumbers

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 the 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 hill. When danger of bugs is past, thin to four strong plants in a hill. For pickling, plant in June. Sprinkle the vines with plaster of air-slacked lime to protect from bugs, or use Slug Shot to kill the bugs.

Each packet of Cucumber seed will contain a quarter of an ounce, sufficient to plant about twenty hills. Two pounds will plant an acre.

Ratekin's Improved White Spine

I consider this the finest flavored of all cucumbers. The vines produce enormous crops and are of unusually vigorous growth, with large thick leaves which withstand the attack of insects. The fruit is perfectly smooth, of a dark green color and measure from ten to eighteen inches long. They are always straight and very solid. The flesh is greenish white, firm, crisp and of the most delicious flavor. Packet, 5c; oz., 15c; ¼ lb., 20c; lb., 75c.

Ratekin's Improved White Spine.

Ratekin's New Crescent Cucumber

This new cucumber I bred up for extreme earliness and quality. It certainly proved itself the earliest cucumber that I 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. Packet, 5c; oz., 10c; ¼ lb., 40c; lb., \$1.50.

Japanese Climbing Cucumber

A marvelous climbing variety introduced from Japan. The vines are strong growing and immensely productive, it being estimated that it will yield three times as much as any other variety in a given space. The fruits are of good size and of fine flavor, adapted especially for slicing and salads. Does best in dry warm summers. Packet, 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

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. Packet, 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

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 contained in its blossom end when in eating condition are so small and tender that they are hardly noticeable. Packet, 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Improved Chicago Pickle.

Klondike Famous

For flavor, uniform size, color and productiveness this Cucumber is absolutely unequaled. In addition to this it comes into bearing very early, continuing throughout the season until killed by frost. Always straight, never turning yellow. It is a hybrid of the White Spine type. The fruits average six to seven inches in length, and about two inches thick. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Boston or Jersey Pickle

Is used almost exclusively by the market gardeners near Boston for pickling. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Cool and Crisp

A strain of the White Spine, somewhat like the Arlington, but larger. Fruit long, cylindrical, dark green. Fine for table use. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 70c.

New Astor

A variety of the highest merit for gardeners, some claiming that they made more money from a crop of these grown early in hotbeds than from any other crop, as they yield a continual daily picking and sell quickly at \$1.00 per dozen. Fruit large, perfect shape, eight to twelve inches long. They are of the very best quality for slicing, as the flesh is white and crisp and they have very few seeds. PRICE: Pkt., 10c; oz., 25c.

Fordhook Pickling

A very small, oval, prickly variety, quite distinct from all others. It is grown exclusively for pickles; is the smallest of all varieties and should always be picked when young and tender. The seed is slow to germinate, requiring usually from two to three weeks. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Chicago Improved Pickle

This variety, which originated with a leading pickle grower near Chicago, is considered the best variety there is, as it is very prolific, matures early and produces an immense number of desirable shaped pickles. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Early Cluster

Vine vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, with uniformly thick end, dark green, but paler at the blossom end. A very productive sort. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Early Frame

An old and popular variety of medium size, straight and handsome; excellent for pickles when young. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Catawissa, Mo.

Gentlemen: I am writing just a few lines with regard to the seed I ordered and received from you last spring. They all came up fine. Please send me your alfalfa circular, as I want to order some alfalfa seed. Yours truly,

A. W. KOCH.

Logan, Ohio.

Gentlemen: I ordered a lot of seeds from you in 1908 and they proved to be highly satisfactory and I am now sending to you for a copy of your catalogue, as there are quite a lot of seeds I want for the coming year. Yours truly,

J. T. KINER.

Bentleyville, Pa.

Gentlemen: Please send me your new catalogue. I bought seeds from you last year and was more than pleased with them. I truly think them the best seeds to be obtained anywhere. They were the very best in quality and could not have been better. Hoping to get the seed catalogue, as I want to send in my order early, I am,

MRS. ANNA RUTON.

Short, Okla.

Dear Sir: I wish to report the experience and results I have obtained from seeds that I ordered from you. I have always found them to be of the very best quality. I have been well pleased with them and am now ordering more. I have been recommending your seeds to everyone. Very truly,

A. J. JONES.

Ratekin's Black Beauty.

Egg Plant

CULTURE: Sow in hotbeds very early in spring and transplant when two inches high into a second bed or into small pots. If this is not done thin to four inches apart. Do not plant out until weather is perfectly settled and warm. Cool nights or wet weather will check them. Keep some back in frames for a second planting, in case of weather changing unexpectedly. Set out plants 3 by 2.

Ratekin's Black Beauty The earliest and best of all large fruited egg plants. The large fruits are thick, of most attractive form, as shown in the illustration. The skin is a rich, luscious purplish black, and on account of its rich coloring commands a higher price on the market than other varieties. The fruits set freely and develop quickly, so that the entire crop can be gathered before there is any danger of frost. This variety is destined to become very popular with truckers and gardeners. **PRICE:** Pkt., 5c; oz., 30c; ¼ lb., 90c.

Improved New York Our strain of this, the leading market variety, we believe to be unsurpassed. Very large size, skin deep purple, flesh white and of excellent quality; very productive. **PRICE:** Pkt., 5c; oz., 30c; ¼ lb., 90c; 1 lb., \$3.25.

Kale or Bore Cole

(One ounce will produce about 3,000 plants.)

Hardier than cabbage, excellent for greens during the winter and spring; a splendid food for poultry. Cultivate like cabbage.

Ratekin's Improved Long Standing Kale A beautiful curled and crimped sort; vigorous habit, perfectly hardy, of a bright green color. It furnishes an abundance of greens during the fall, winter and spring. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 70c.

Dwarf Green Curled German Leaves yellowish green, very compact and beautifully curled. Sow in September for winter and spring use. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.

Kohl Rabi

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

Early Purple Vienna A bright purple. The leaf and stems are tinged with purple. **PRICE:** Pkt., 5c; oz., 30c; 2 oz., 55c. ¼ lb., \$1.00; 1 lb., \$2.75.

Early White Vienna Flesh white and tender; good market sort. **PRICE:** Pkt., 5c; oz., 20c; ¼ lb., 50c; 1 lb., \$1.75.

Leek

Belongs to the onion family and by many preferred to that vegetable. Sow the seed and care for young plants same as for onions, but they need a little more room in order to develop more fully. When the young plants are double in size of a goose quill transplant to a prepared bed in rows one foot apart and four or five inches in the row.

London Flag This variety is more cultivated in this country than any other. It is hardy and of good quality. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., 90c.

Leek—London Flag.

Dear Sir: I have just received the seeds I ordered from you, and I want to say they are the very finest seed I have ever seen. Very truly,
PETER JORDON.

Gentlemen: I received the seeds I ordered from you yesterday and they were entirely satisfactory. Very truly,
E. D. JONES.

Gentlemen: I received my seeds I ordered from you, and they look good to me. Could not be better. Very truly,
F. C. COOK, Montford, Wis.

Gentlemen: I received my last order for seeds today and I am well pleased with them. They are fine. Thanks for your prompt attention to my order. Truly yours,
ORA McKINLEY, Sexton, Kas.

Dear Sir: I received my seed in good shape and am well pleased with them. Thanks for your prompt attention. Very truly, J. V. DAVIDSON, Wartrace, Tenn.

Dear Sir: I have received the seeds I ordered from you, and they are all O. K. I could not have gotten better seeds anywhere. When in need of more I will send you an order. Very respectfully,
W. W. HILL, Blain, N. C.

Dear Sir: I have received your seeds sent me, and they are certainly of the best. Thanks for extra packages. Yours truly, S. GILBERT, Hutton Valley, Mo.

Dear Sir: My seeds arrived in good condition and I am well pleased with them. Thanks for promptness. Truly yours,
R. J. JACOBS, Burrough, Ga.

Dear Sir: I received the seeds you sent me in first class order. Very truly yours,
A. HARTWIG, Thayer, Mo.

Gentlemen: I am just in receipt of the seeds I ordered, and I want to thank you for giving my order prompt attention. They are all satisfactory. Very truly,
ROY BADGERS, De Peyster, N. Y.

Dear Sir: My seed arrived, and I am much pleased with them. Will send you another order in a short time. Very truly, R. J. COLVIN, Whiteheart, Tenn.

Gentlemen: I have received the seed I ordered from you, and am well pleased with them. Truly,
E. BOLEN, West Frankfort, Ill.

Gentlemen: We received the seeds and were well pleased with them. Thanks for prompt attention. Yours truly,
McNABB BROS., Zion City, Ill.

Chicago, Ill. April 3, 1911.

Lettuce

CULTURE: Sow the seed in hotbeds or flats during February or early March, prick the young seedlings out in flats or cold frame several inches apart each way, and as soon as a nice, rich warm spot can be prepared in open ground in spring, transplant the well hardened plants in rows a foot apart, allowing eight to twelve inches space between the plants in the row. For succession sow seed thinly in open ground, and thin the plants five or more inches apart. Sow for succession every few weeks until the fall. Some varieties do well in a cool, forcing house during winter.

Ratekin's 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:** Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 25c; 1 lb., 90c.

Grand Rapids A forcing variety of superior quality and beautiful 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:** Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 90c.

Iceberg Has an unusually solid head. The white main ribs of the leaves curve toward the center, which keeps the interior thoroughly bleached. It is quick growing and always crisp and tender, whether propagated in early spring or in the hot days of summer. **PRICE:** Pkt., 5c; oz., 15c; $\frac{1}{4}$ lb., 30c; lb., 90c.

Ratekin's Early Prizehead.

Big Boston Lettuce

A GRAND LARGE CABBAGE LETTUCE.

For Either Midsummer or Fall Use, Big, Compact, Tender and Crisp, Creamy-White Heads.

This grand variety has proven to be most valuable, steadily gaining in popularity until it is now more extensively grown than any other kind of lettuce, either for the private table or for sale, north, south, east or west. Whether grown in the open ground for summer and fall use, or in frames for spring, or forced cool in greenhouses for winter use it invariably gives both grower and user the utmost satisfaction, producing during all seasons, under ordinarily favorable conditions, splendid large buttery-yellow heads, packed with thoroughly blanched leaves, crisp, tender, sweet and white, delighting both the palate and the eye. This grand variety makes a handsome plant, with but few outside leaves, and stands long before bolting to seed. Although Big Boston is one of the best large-headed midsummer lettuces it is also peculiarly adapted for cool, open-ground culture; large areas of it may be seen in the vicinity of northern Iowa as late as November 15th; a slight covering of salt hay amply protects the plants from hard frosts, and when cut for market the leaves are as fresh, bright and untinged as if in midsummer. Thousands of acres of it are grown during the winter in Florida and other Southern States for shipping to Northern markets. As far north as Minnesota it is a wonderfully popular summer lettuce. In fact, we know of no other variety that gives such general satisfaction under so many varied conditions. **PRICE:** Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., \$1.00.

Big Boston.

Ratekin's May King Lettuce Equal alike for forcing under glass or outdoor planting. The plants are of quick growth, practically all head and handsome. From early spring plantings in the open ground they grow quickly to a diameter of six to seven inches, with the broad, light green outer leaves folding closely about the round, solid head. In cool weather the edges of these outer leaves are lightly tinged with brown.

The inner leaves are blanched to a rich golden yellow, and have a **SPECIALLY FINE, RICH, BUTTERY FLAVOR**. The solid round heads are so firmly folded that they can be shipped to distant markets and arrive in the best of condition. It is the very best lettuce for early planting in the spring, and again during August and September for fall use. **PRICE:** Pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 35c; lb., \$1.00.

Market Gardeners (Ratekin's Private Stock). Sold only in sealed packages. This is one of the very best of the "Butter" head lettuces. It is a very great favorite with market gardeners on the city markets, and with them holds the lead in point of popularity. This is getting to be equally true in other markets. **PRICE:** Large pkt., 5c; oz., 10c; $\frac{1}{4}$ lb., 30c; lb., 90c, postpaid.

Lettuce

Early Curled Simpson

An improved variety of Curled Simpson, with large, loose head and excellent flavor. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.

California Cream Butter

A splendid variety for summer. It produces a very large and white head. It will stand extreme heat and is slow to go to seed. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., 90c.

Grand Rapids A forcing variety of superior quality and beautiful 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: Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., 90c.

Black Seeded Simpson

It is much lighter colored than preceding; it grows nearly double in size; of fine quality. One of the best for forcing or outdoor planting. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 90c.

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: Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 90c.

Salamander An excellent spring, summer and fall variety, forming good-sized heads. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

Muskmelons

CULTURE: Select a light, rich, sandy soil, and after all danger of frost is over and the ground has become warm and dry plant in hills four to six feet apart each way, six to twelve seeds to a hill. When up and all danger of insects has passed pull out all but three plants. Cultivate until the vines cover the ground, and pinch the ends off the growing shoots to induce early fruiting. Ashes, lime, or even dry road dust is excellent to sift over young plants when the dew is on to prevent the attacks of insects. A few hills for early use may be had by sowing in hotbeds, on pieces of sod or in pots. The seed may also be started out of doors under hand frames or glasses. It is quite important that proper soil be selected for growing muskmelons.

Grand Rapids Lettuce.

Ratekin's Early Market.

Ratekin's Early Market

Its beautiful shape and handsome appearance are remarked upon when placed side by side on the market bench or counter with any of the popular sorts of the day. It ripens only a few days after the early Hackensack, is more prolific, more uniform, bears longer and the fruit is more solid; seldom bursts at blossom end; flavor and quality are all that can be desired. It is green fleshed, with a small seed cavity. A valuable sort for general crop. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., \$1.00.

Randolph Center, Vt.

Gentlemen: We received the seed ordered from you this morning, and they are sure fine. We are well pleased with them. Think them the best seed to be obtained anywhere. Will send you our order again when in need or want of anything in our line. Very truly, A. J. MARSH.

Muskmelons

The Burrell Gem Muskmelon A Red-fleshed Rockyford. 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 through 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:** Large pkt., 5c; oz., 10c; lb., \$1.50.

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 state of New Jersey than any other sort, and is used in enormous quantities in the Eastern cities and at the seashore resorts. The vines are very prolific and the culture profitable. **PRICE:** Larke pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c., postpaid.

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 shipper, just the size for hotel 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:** Large pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c, postpaid.

Paul Rose or Petoskey.

best type of the genuine Rocky Ford Muskmelon. It has been used in many sections and is pronounced by melon growers a very superior strain. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 90c.

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 green rind. It is peculiarly crystalline in appearance, juicy and rich. The flavor is sweet and luscious beyond description. Rather small for marketing, but very nice for home use. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 75c.

Emerald Gem.

Burrell Gem.
A Red Fleshed Rocky Ford.

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 fruits 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

Ratekin's Rocky Ford.

Springfield, Ill.
Gentlemen: Last spring I ordered an ounce of Burrell's Gem Melon seed from you and they came just fine. The melons were the best flavored I ever tasted and of good, even size.

GLEN MACKAY.

Grand Rapids, Mich.

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. Yours truly,
GEORGE BANNER.

SEE SPECIAL PRICES AND RATES ON PACKET SEEDS;
ALSO COLLECTIONS ON PAGES 85 AND 86.

Muskmelons

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, of dark green color and slightly netted. 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:** Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Extra Early Hackensack

We offer under this name a very distinct stock, different and much superior to that often sold at 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:** Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 75c.

Osage Melon or Miller's Cream.

Improved Cantaloupe

A finely improved variety, often weighing from fifteen to twenty pounds. The flesh is thick, light in color and of fine quality. Quite early and a splendid keeper. Include this variety in your order.

PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Improved Cantaloupe.

Small Green Nutmeg

Fruit of medium size, slightly ribbed, globular. Skin dark green, becoming yellow when overripe and nearly covered with broad, shallow netting. Flesh thick, a little coarse, but of fine flavor. This variety is in universal demand for both home and market use. It is the size best suited for hotel and restaurant use. Our stock is carefully grown and selected and will be found first class in every particular. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Gasport, Ind., Feb. 26, '12.

Gentlemen: It is a pleasure to say that anyone can be perfectly satisfied in sending their orders for seeds to the RATEKIN SEED HOUSE. We know seeds, like humans, are full of life. Some vigorous and some frail, but this depends upon the conditions and manner in which they are cultured. You have given careful study to the vitality and quality of your seeds. You have exercised extreme care in the selection of the seeds, especially the garden seeds you offer, and I believe you supply a quality of seeds that cannot be excelled in freshness, sweetness or quality. Yours truly,
ZOULA SNODGRASS.

Watermelons---The Best New Standard Varieties

ONE OUNCE FOR THIRTY HILLS; FOUR TO FIVE POUNDS FOR AN ACRE.

CULTURE: See directions given under Muskmelon. Watermelons, however, are slightly less subject to "bug" depredations and disease attacks than muskmelons. At the same time they are more easily hurt by strong spray mixtures, and caution in the use of such mixtures is advisable.

Tom Watson The best shipping melon grown. A large, oblong melon, the skin of which is dark green, with thick netting on the entire surface. This melon is absolutely new and quite distinct from all other varieties. It averages eighteen to twenty-four inches long and ten to twelve inches in diameter, and weighs fifty to sixty pounds. The rind is thin but tough, and flesh a bright, attractive red color. **CRISP, SWEET AND DELICIOUS.** The heart is large, with no core. Seeds are brown, tipped with white. The appearance and quality of this melon makes it one of the very best of shipping varieties. Tom Watson will prove the most profitable of all melons to truckers and gardeners. Our seed stock was grown under contract by one of the very best melon growers in the country, he having obtained his seed direct from the originator in Georgia. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Ratekin's Champion.

Ratekin's Champion A cross between Kolb's Gem and Sweet Heart. All that could be said of KOLB'S GEM as to good shipping qualities can be truthfully stated in a higher degree of RATEKIN'S CHAMPION. All the praise of high quality, bestowed on the Sweet Heart can be repeated of our new melon, but its prominent point of merit is its extreme size. **NO MELON EVER YET PRODUCED ANYTHING LIKE SO UNIFORMLY LARGE FRUIT, NOR APPROACHING IT IN PRODUCTIVENESS.** Melons weighing from forty to sixty pounds are frequent. It is the most prolific watermelon ever grown. Its color is a rich, dark green. Of uniform, symmetrical shape, roundish to bluntly oval, and this similarity of shape running through the whole field. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 90c.

Ratekin's New National Melon

The reason that this fine new watermelon received the name of National was because of its proven ability to flourish almost anywhere, even in districts where watermelons are not usually grown. The National is a watermelon of medium to large size and of high table quality. It is of Southern origin, but thrives well in the North. In shape it is oblong. The outside color is pale, with dark markings, resembling Seminole, but with markings more distinct. The flesh is brilliant red in color and remarkably solid—so solid, in fact, that a 40-pound National Watermelon does not appear to be much larger than a Seminole weighing only twenty-five pounds. The flavor is delicious, and the flesh is entirely stringless. The rind, though thin, is very tough, insuring good shipping qualities. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 90c. Write for special prices on 4-lb. lots and over.

Sweet Heart Melon This melon is early, large, handsome, heavy and productive. Shape is oval; color, mottled light to very dark green. Flesh bright red, solid, tender and very sweet. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

M'lver Wonderful Sugar A large oblong

melon of handsome appearance; skin shows broad bands of white, with narrower ones of green. Its soft, pink flesh is crisp, juicy, very sweet and solid to the center. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Kleckley's Sweet

Large oblong melon. The skin is dark green, flesh bright scarlet, the rind only about one-half inch in thickness. The scarlet flesh is sweet and sugary, and is of such texture that it leaves no strings of pulp whatever in eating. The melon is better for home use than for shipping, and we believe it is the **BEST TABLE MELON** for home consumption in the world. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 80c; 5 lbs., \$2.50.

Grantsburg, Wis.

Gentlemen: I received your seeds in good condition and am well pleased with them. I can heartily recommend your firm to anyone in need or want of anything in your line. I have always been well pleased with seed you have sent me. Very truly,
P. HOFF.

It is early, has a remarkably thin, tough rind, and will keep and ship well. The flesh is bright scarlet and of fine quality. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Watermelons

Kolb's Gem.

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 a dark green, with lighter narrow stripes; very thick and tough rind. Flesh light red and of good flavor. Our seed is choice. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 75c.

Mountain Sweet The old standard. Best quality. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 75c.

Phinney's Early Early, medium size and quite productive. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Peerless or Ice Cream. The great home market melon. The old stand-by is one of the best general croppers for the home market; has too thin a rind for shipping unless packed in straw. We have sold it for years to our most extensive Nishna Valley growers, for whom it brings the highest prices and meets with a ready sale, regardless of other varieties that may be on the market, because it has become a great favorite with market gardeners and melon dealers and consumers. Few, if any, surpass a True Ice Cream for quality and productiveness. Medium early; fruit oblong, large size; rind light mottled green; flesh bright scarlet, solid to the center, melting and delicious. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c; 3 lbs., \$2.00.

Triumph. A Southern variety which has become very popular with shippers. The fruit is uniformly large, nearly round, dark green, indistinctly striped with a lighter shade; rind thin and firm, making it an excellent shipper; flesh bright red and of good quality. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Seminole Watermelon Very large, exceedingly productive, of the finest quality, and the beautiful red core makes it attractive. Sweet and very delicious. Beautiful shape for market. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c; 3 lbs., \$1.65.

Monte Christo. In our trial grounds this has proven to be a northern strain of "Kleckley's Sweet" and is certainly very sweet and delicious melon. It is very large, dark green color outside, and has beautiful red core and is never stringy. It is a grand variety for both market and the family garden. PRICE: Postpaid, pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c. Purchaser's expense: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 65c.

Special Offer. One packet each of any seven varieties of watermelons listed on this page for 25 cents, one ounce each, 50c, postpaid.

Cuban Queen. This is a large variety, often weighing eighty pounds and upwards; striped light and dark green; an enormous cropper. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Black Diamond. One of the largest and best shippers produced. A quick seller and fine for home market and family gardens. It has a beautiful red core and is sweet and delicious. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Cole's Early. Decidedly the finest early variety for the private garden, but is too brittle for long shipments. It is very early and will mature further north than other sorts. Of medium size, very productive, continuing to bear throughout the season. Flesh of bright red color, of granulated, sparkling appearance. In flavor it is lusciously sweet and refreshing. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Apple Pie. Grows uniformly round and smooth, striped and marbled with light green. Flesh white and solid, seeds red. It should be borne in mind that this variety is not for eating in the raw state, but for preserves, pickles, etc. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Apple Pie Melon

Chatham, Mich.
Dear sir: I am sending you a small order for seeds. I have been using your seeds for several years. The Early Champion Oats have never failed to give me a good crop. I have never seen such clean grass, clover and oats. Your Giant Fodder Corn I got from you last year could not be beat. I will send you my order for fall seasonable seeds, and will be pleased to have your best prices on same.

Very truly,
A. J. CHARTIER.

Perham, Maine.
Gentlemen: I have received the seeds I ordered from you and they are fine. I am well pleased with them. Will let you know next fall just what the yield is.

Very truly,
N. BONDERSOON.

Phoenix, N. Y.
Dear sir: Just received the seeds I ordered from you and in good condition. They were fine and just what I ordered. Thanks for prompt attention.

S. COOK.

Edwardsville, Kans.
Dear Sir: I have received the seeds I ordered from you today and I want to tell you that I am highly pleased with them. I can recommend your seeds to any who are in need or want of anything in your line. Very truly,
J. D. VALENTINE.

Watermelons

Mixed Watermelons

Twelve varieties of the finest watermelons, the largest, earliest, sweetest; grown separately and seed carefully mixed by us. Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Dark Icing or Green Mountain

¼ lb., 25c; lb., 75c.

Fruit round and of medium size; rind dark green, thin, but very strong; flesh deep scarlet; rich, juicy and delicious. PRICE: Packet, 5c; oz., 10c;

Light Icing

Similar to the preceding, but light variety. PRICE: Packet, 5c; oz., 10c; ¼ lb., 25c; lbs., 75c.

Pride of Georgia

A much better table variety than the "Kolb's Gem," though not so good a shipper, owing to the exceeding thinness and tenderness of the rind. In form the melons are an oblong oval, bearing indentations somewhat like the muskmelon. The vines are exceedingly prolific. PRICE: Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Gipsy or Georgia Rattlesnake

A superior early market variety; large, oblong, the skin green, mottled and striped. PRICE: Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Atlanta, Ga.

Gentlemen: Kindly quote me your best prices on forty pounds Tom Watson melon. I used your melon seed last year and had splendid success. Yours truly,

C. B. CARRUTHERS.
Springfield, Ohio.

Gentlemen: Your Tom Watson is one of the best melons I have ever grown. I ordered one pound of seed from you last year and had the very best of success. Yours truly,

W. W. THOMPSON.
Niangua, Mo.

Gentlemen: I received the seeds all O. K. Many thanks for the seed you sent in correction of my order, and for the prompt and satisfactory settlement of the mistake. Yours truly,

G. R. MORRIS.
McFall, Mo.

Gentlemen: I have received my seeds ordered from you and am well pleased with them. I expected them to come by mail, but they came by express. Many thanks for your kindness. Very truly,

W. DANIEL.

Quincy, Ill.

Gentlemen: The melon seeds arrived today and are fine. Thanks for your promptness and also for the extras. Yours truly,

R. E. WALKER.

Keemer, Mo.

Dear Sir: Received the seeds I ordered from you and they were sure fine. Thank you very much for the prompt attention you gave my order. Very respectfully,

A. B. LANGDON.

Fairport, Iowa.

Dear Sir: I received my seeds that were delayed in transit today, and they were fine. I want to thank you for your kindness in tracing them and getting them to me as soon as possible. Yours truly,

CHAS. ROEHLK.

Kirkland, Illinois.

Gentlemen: I received the seeds I ordered from you, although they were somewhat delayed in transit. They were received in good time. I have never planted better seeds. Very truly,

C. J. KOCH.

Ratekin's Reliable Onion Seed

First Quality Onion Seed—Our Great Specialty.

WE WOULD LIKE TO SELL YOU YOUR ONION SEED.

There is no crop that depends more upon the quality of the seed than does the Onion crop. Good ONION SEED is of the most vital importance if you expect satisfactory results. The seed we offer we know is not surpassed anywhere, and is always thoroughly tested for vitality before it is sent to customers, so that success is certain where soil and season are favorable and is equally sure to produce an abundance of well-shaped Onions, free from scullions or stiff-necks. Our one aim has always been, and is, to sell at reasonable prices, and as low as any reliable firm in the American seed trade who have an honest reputation for offering only strictly first-class onion seed to their customers.

CULTURE: Onions do best on a rich loam, previously cultivated for two years. Stiff clay and light sand are equally unfavorable. The land should be highly fertilized with well rotted manure, complete fertilizers, etc. Fresh stable manure has a tendency to produce soft onions. Drill in four to five pounds of seed per acre, one-half inch deep. If sets are wanted use sixty to eighty pounds of seed per acre. Six to ten bushels of sets will plant an acre. Fine, marketable size onions (according to variety planted) are easily produced the first year from early spring sown seed. Culture should be frequent though shallow. The same ground may be used for onions season after season, if well fertilized annually. Bone meal is an excellent fertilizer. Winter storage demands dryness and protection from sudden changes. Onions should never be handled while frozen.

The variety of onions to grow depends largely upon what variety your market demands. There is a great difference in markets. In the Southern markets about the best selling onion is the Red Globe, of which Ratekin's Red Globe is the very best possible strain. Red Wethersfield, Prizetaker, Ratekin's White Globe, Ratekin's Yellow Globe and Silver Skin are also in great demand throughout the South and always find a ready market at the top prices. Other localities take different varieties. All the onions I list have their good qualities and will prove profitable for you and I have given careful attention in writing the descriptions to bring forth the respective merits of each variety. I grow onion seed for some of the largest and most critical market gardeners and take the very best of care with all my seed stock, overseeing personally that it comes true to name and is of strong vitality. I have large quantities of the very best and purest strains and can save you money. Don't fool with store seeds. You are taking too big a chance. Be sure that you have good fresh seed and you can nearly always be assured of a good crop.

Ailsa Craig.

The Ailsa Craig

A very large, yellow fleshed variety of onion that is very popular with English gardeners. It resembles the "Prizetaker," but will grow much larger and more globular in form. The skin has an attractive straw color, flesh is mild, and the onions keep remarkably well for such large size. It will prove valuable to those who grow onions for exhibition purposes, as it is the most showy and attractive onion that can be grown. It is also valuable to truckers who grow for a critical market, and one of the best for the home garden. For producing the largest and best onions, it is best to sow seed in the hotbed early in the spring and transplant when weather conditions will permit. Per packet, 10c; oz., 20c; ¼ lb., 50c; lb., \$1.75.

Mammoth Silver King.

New White Queen Extra Early Bartletta

market. They are pure paper white color, very mild and delicate in flavor, one and one-half inches in diameter and three-fourths of an inch in thickness. For table use and pickling it is most valuable. PRICE: Pkt., 5c; oz., 15c; 1/4 lb., 50c; lb., \$1.75.

Chives Perfectly hardy little perennials of the onion tribe, and are grown for their tops, which are used wherever the flavor of onion is required. Plant in small clumps in garden; they will grow readily. The tops appear very early in spring and can be shorn throughout the season; indispensable for use in omelets. PRICE: Roots, per bunch, 15c; three for 35c; doz., \$1.00.

Onions

Mammoth Silver King Attractive form flattened, but thick through. Single bulbs often attain weights of from two and one-quarter to four pounds each. The skin and flesh are white and of a particularly mild and pleasant flavor; matures early and is of uniformly large size and perfect form, and will bring a large price in market. PRICE: Pkt., 5c; oz., 15c; 1/4 lb., 40c; lb., \$1.40.

Yellow Globe Danvers A very handsome round or globe shape variety of large size, with thin, yellow skin, white flesh, fine grained, mild, very firm and the best of keepers. It ripens early, sells readily at the highest prices in our markets. This is one of the best cropping varieties in existence; has yielded 1,000 bushels per acre; one of our customers states that his crop averaged over 800 bushels per acre for nine years. PRICE: Pkt., 5c; oz., 10c; 1/4 lb., 30c; lb., \$1.00; 4 lbs., not prepaid, \$3.60.

Australian Brown Onion Extra early, long keeping; the most valuable variety introduced in a generation. The Australian Brown Onion is of medium size, wonderfully hard and solid, and most attractive for market, both as to form and appearance. They are extremely early in ripening and never make stiff necks or scullions. From its firmness and hardness it will keep in good condition longer than any other onion known. The color of the skin is clear amber-brown. So widely contrasted from any other onion is this color that it will be noticed on market, and when once bought purchasers will most likely call again for those "beautiful brown onions." PRICE: Pkt., 5c; oz., 10c; 1/4 lb., 35c; lb., \$1.25.

White Bermuda A favorite in the South. PRICE: Pkt., 5c; oz., 25c; 1/4 lb., 80c; lb., \$2.75.

Small; noted for extreme earliness and mildness of flavor; much used for pickling. Large pkt., 5c; oz., 15c; 1/4 lb., 50c; lb., \$2.00.

This is a new distinct variety; the very earliest onion in cultivation. It is fully two weeks earlier than the Early White Queen which heretofore has been the earliest variety on the

Dear Sir: I must say that your seeds last year which I ordered and received were the finest I have ever received. I am sending you an order for some other seeds in this letter. Yours truly,

Colorado Springs, Col.

MISS F. PIPER.

Roby, Tex.

Dear Sir: The seeds I ordered from you have been received, and they are entirely satisfactory. Thanks for prompt attention. Yours truly,

J. T. LEWIS.

Sparkville, Ind.

Dear Sir: The seeds arrived all right and just as I ordered. I am well pleased with them. The seeds I got from you last spring did well, although we had a dry summer to contend with. Thanks for prompt attention. Yours truly,

DICK NOWLAND.

Grundy Center, Iowa.

Gentlemen: I received your seeds and was well pleased with them. They were simply fine. Thanks for prompt attention. Yours,

F. CLARK.

Plymouth, Ind.

Dear Sirs: The seeds I ordered from you have arrived and in perfect condition. They are first class. The Blue Rose also received. Very truly,

Derma, Miss. Gentlemen: I have received the seeds I ordered from you in good condition. The millet and garden seed are the very best that could be obtained anywhere. Very truly,

Wax Pool, Va.

Gentlemen: My order for seeds received in due time. The seeds were fine. Allow me to thank you for the promptness given to my order. Very truly yours,

J. W. POWER.

For general purposes, the country over, no variety is more largely grown. The largest, most uniform, heaviest yielder and the best keeper 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 large 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., 5c; oz., 10c; 1-4 lb., 35c; lb., \$1.25.

The Mammoth Prize Taker.

Ratekin's Superb Globe Onions

See full color illustrations on outside back cover page.

Ratekin's Red Globe My 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. I have bred up a variety superior to any other of the above named sorts, and to distinguish it from ordinary strains have named it Ratekin's Red Globe. It is a perfect globe, skin being of a rich, glossy red, flesh fine grained, and always mild and pleasant. Like my other globe varieties it is very hardy and a splendid keeper, and always commands top prices on the market. You make no mistake in planting this variety. PRICE: Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.60.

Ratekin's White Globe On account of its handsome appearance this onion always brings top prices on all markets. It is 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: Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Ratekin's 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 I have bred up for years, so I am sure that any of my friends who entrust their orders with me will be highly pleased with the results they obtain from their crop. All of my Globe Onions ripen evenly, are wonderful keepers, and on this account should be planted more extensively. PRICE: Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50.

Onions

Mammoth Prize Taker This is the large, beautiful Spanish variety, sold in the fruit stores and markets of all large cities. Enormous size, fourteen to sixteen inches in circumference. Outside skin is rich yellow, while the flesh is white, sweet and tender. They bottom well, are free from stiff necks, and have produced more bushels of marketable onions to the acre than any other variety in America. In market they attract attention, sell readily at advanced prices. True American grown seed. PRICE: Pkt., 5c; oz., 15c; ¼ lb., 40c; lb., \$1.40.

White Portugal or Silver Skin Onion

The leading White Flat Onion. For the family garden it is one of the best. The bulbs attain a good size, ripening evenly; the color is a beautiful silvery white when cured under cover. Its shape is flat, but symmetrical. For a white variety it is not only early, but a good keeper. For slicing and boiling it is one of the best, the flesh being mild and tender. It is largely grown for pickles when sown three or four times as thick as usual, and is also extensively sown for sets. (See cut.) PRICE: Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Onion Sets

The planting of onion sets is increasing rapidly year after year. They are used for several purposes. The bottom onion sets produce a large onion ready for market from four to six weeks earlier than can be had by sowing the seed, and the product of the set is the same as that obtained by sowing seed. This enables the grower to sell his entire crop earlier in the season, at which time prices usually are higher than when the bulk of the crop reaches market. It also permits the sowing of another crop on the land the same year. Bottom sets also produce good green onions on most any soil in half the time it takes to raise them from seed.

Bottom onion sets are produced by sowing seed very thickly, and they are harvested before they have reached full development. Our sets are small, one inch or less in diameter, dry and unsprouted.

We grow our own onion sets, which enables us to produce hard, sound, clean sets of the best quality. As they are used to obtain onions earlier than they can be had from seed it follows, therefore, that Northern grown sets will produce onions earlier than Southern grown sets. We clean them thoroughly, so as to be free from trash and rubbish, which is so often included with many of the onion sets ordinarily sold. In the spring of the year our sets are hard and sound, while at that time Southern sets are very often so dried and shriveled and so lifeless that they either grow slowly or fail entirely to make a bulb. We do not think it too much to say that a bushel of our sets will give almost twice the number of onions as will a bushel of ordinary sets.

ABOUT PRICES: As the value of onion sets fluctuates greatly our prices are subject to market changes. The prices named in this catalogue are based upon values existing at the time of publication, January 1st. If you wish to purchase round lots be sure to write us for lowest market values.

Pumpkin

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

Ratekin's Mammoth Prize.

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

Pumpkins are sold in the markets in large quantities every fall and are considered a very profitable crop. They are also valuable for feeding to stock.

Include a few pounds in your order. Planted with corn two pounds will plant one acre.

Ratekin's Mammoth Prize The largest pumpkin grown. HAS WEIGHED AS HIGH AS 225 POUNDS. A prize winner. The flesh is fine grained and the quality is excellent. The flesh and skin are of bright golden yellow color. Notwithstanding its large size it is a fine variety for pies and is a splendid keeper. If you wish to see just how large a pumpkin you can grow try this variety. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 35c; lb., 90c.

Japanese Pie A crook neck variety. Early. Seeds are marked very curiously. Flesh deep yellow; of fine quality. Keeps well. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; 1 lb., 90c.

Early Sugar or Pie Small, round, flat, deep orange yellow. Flesh fine grained, sweet and of the finest quality. A good keeper. One of the best for pies. PRICE: Packet, 5c; oz., 10c; ¼ lb., 25c; 1 lb., 75c.

Sweet or Sugar Fruit small and round. A very prolific variety and superior for pies and table use. The skin is deep orange yellow; an excellent keeper. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

Connecticut Field The common field or cow pumpkin. If you have any live stock to feed it will pay you to put in a few acres of these. PRICE: Oz., 5c; ¼ lb., 10c; lb., by mail, 35c. By express or freight: 10 lbs., \$1.75; bu. of 25 lbs., \$3.00.

Large Cheese Pumpkin Large, round, flattened fruits, with creamy buff skin. It is an excellent keeping variety; with thick flesh of excellent fine quality. Commonly called sweet pumpkin throughout the West. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c; 5 lbs., 40c per lb.

Yankee Pie This is the noted New England Pie or Small Sugar Pumpkin. Same shape and color as the "Connecticut Field," but smaller, very sweet, fine grained and one of the best varieties for table use. We have sold this to thousands of customers in all parts of the country, and it pleases everyone for making pies. Early and very productive. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Mammoth Tours Also called "Mammoth Whale." Originated near Tours, France, where it is largely grown, both for feeding cattle and table use. Grows to an immense size, sometimes three feet in length, and to a weight of 100 to 200 pounds. Flesh of salmon color. Seed of a peculiar shape. PRICE: Pkt., 5c; oz., 15c; ¼ lb., 30c; 1 lb., \$1.00; 5 lbs. for an acre, 90c per lb.

Dear Sir: I have received the seeds I ordered from you today, and in good condition. I am well pleased with them and when in need of anything in your line I shall send you my order. Respectfully,

Advance, Arkansas.

W. C. BELEHER.

Gentlemen: I received the oats, speltz and flax seed I ordered from you and have them in the ground, and they are doing fine. I will report to you my success this fall.

Parkers Lodge, Pa.

Truly yours.

L. W. SEIGWORTH.

Emerald, Neb.

Dear Sir: I have just received the seeds that I ordered from you and I want to tell you just how well pleased with them I was. I think them the best seed I have ever seen. Very truly,

A. C. DEINER.

Valley, Idaho. Gentlemen: I received my seeds yesterday and I am well pleased with them. When in need of any other seeds I will send you my order, for I know I will always obtain the very best grade and quality of seeds. Yours truly,

J. S. Wilson.

Mammoth Tours.

Okra or Gumbo

In high esteem for soups and stews. A fashionable Southern vegetable of easy growth at the North. An annual. The pods are used when young and tender.

CULTURE: Sow in May or June, after the ground is warm, in drills three feet apart, and thin to ten inches apart in the rows. An ounce of seed to 100 feet of row.

Ratekin's Improved Giant Green Pod

A new Okra esteemed by canners and market gardeners. It is a great improvement on the old green podded sorts. Large, handsome green pods. Fine quality, very productive, four to five feet tall. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 75c.

Peppers

One Ounce Will Produce About 1,800 Plants.

The culture of Pepper is the same as for Egg Plant; the plants need quite as much heat to perfect them, though they mature sooner and may be sown a little later. Guano, hen dung, or any other bird manure, hoed into the surface soil when the plants are about six inches high, will wonderfully increase the product and also improve the quality of the fruit.

Mammoth Ruby King Pepper

One of the most popular large fruiting varieties, a prolific bearer of extra large ruby red fruits, five to six inches long by three to four inches in diameter; flesh exceedingly thick, sweet and so mild that it is often eaten sliced as salad, splendid for stuffing, etc. It is a very attractive variety and a valuable acquisition. Our strain selected and is absolutely pure.

Per pkt., 10c; oz., 30c; ¼ lb., 80c.

Sweet Mountain

Plants very productive, growing upright, with moderately large leaves. Fruit very large, long, often eight inches or more in length by two in diameter, very smooth and handsome, being when unripe of a bright deep green color, entirely free from any purple tinge, and when matured of a rich red. Flesh very thick, sweet and mild flavored. Well suited to use as a stuffed pickle.

PRICE: Pkt., 5c; oz., 20c; ¼ lb., 50c.

Large Bell or Bull Nose

Our stock of this well known variety, which is sometimes called Sweet Mountain, is a great improvement on the best stock obtainable of a few years ago. Plant vigorous, compact, very productive, ripening its crop uniformly and early. It is one of the most popular and desirable sorts. Fruit large, cylindrical, with thick, mild flesh; quality for use in salads and pickles, color bright red when ripe. Pkt., 5c; oz., 20c; ¼ lb., 50c.

Chinese Giant

PRICE: Per pkt., 10c; oz., 40c; ¼ lb., \$1.50.

Red Cayenne

PRICE: Per pkt., 5c; oz., 25c; ¼ lb., 90c.

Coral Gem Bouquet

PRICE: Pkt., 10c; oz., 50c.

Red Chili

PRICE: Pkt., 5c; oz., 20c; ¼ lb., 60c.

Mammoth Ruby King Pepper.

Ratekin's Moss Curled.

Parsley

Sow in March, thinly in drills one foot apart and one-half inch deep. Soak seed in warm water a few hours before sowing. For winter use protect in a glass frame or light cellar. Very useful for flavoring soups and stews and for garnishing. The green leaves are used for flavoring, or they may be dried crisp, rubbed to a powder and kept in bottles until needed.

Hamburg

A turnip rooted variety, used for flavoring soups, etc. **Price:** Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Ratekin's Moss Curled Parsley

A handsome variety of quick, robust growth, forming compact, ornamental plants densely furnished with strong stemmed graceful leaves, finely cut, most beautifully curled, and of that brilliant emerald green color so highly attractive when used for garnishing. The flavor of the leaves is also unusually rich and aromatic, rendering this variety of special value where used for flavoring in sauces, dressing, etc. either when fresh or dried. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Improved Ground Pea or Peanut

Peanuts can be grown anywhere and everyone should plant them for themselves and children.

Red Cross

This very desirable variety is as early as the earliest, the most hardy, very prolific and of the best quality. Boys, here is a chance for you. Think of growing peanuts in your own garden and have plenty of them to eat. Shell the nuts carefully so as not to break the inside skin, and plant as soon as the ground becomes warm from two to three feet apart each way, four to five to the hill, covering two inches. The soil should be deep and mellow. They produce twenty-five to seventy bushels per acre and are as easily cultivated as corn. **PRICE:** Pt., 15c; qt., 25c.

Spanish

A very early variety, but the pods are small. **PRICE:** Pt., 15c; qt., 25c.

Sweet Peas

While you are ordering peas for the vegetable garden don't forget the beautiful Sweet Peas. We have something to say along this line that will certainly interest you.

Improved or Table Geurnsey.

Parsnips

ONE OUNCE WILL SOW
200 FEET OF DRILL
FIVE POUNDS TO
AN ACRE.

Sow early in spring in good rich soil, which has been plowed deep, in drills fifteen inches apart, covering half an inch. Thin to five or six inches apart in rows. They are improved by frost.

Ratekin's Improved Hollow Crown.

This is a highly improved type, producing uniformly large and handsome roots of stocky form, heavy at the shoulder, well rounded, gradually tapering to the base, so that they are easily dug, and if grown in properly pulverized soil, the roots will be smooth and free from wrinkles and side roots. The flesh is white, of fine texture, free from core and stringiness, and especially fine flavored, cooking tender, sweet and rich, rendering it one of the finest of table vegetables for winter use. The roots may remain in the ground all winter, being hardy, or some may be dug late in the fall and stored in sand or soil, so that they can be gotten at easily when the ground is frozen. Frost improves their quality. This parsnip is the heaviest cropper of all and we recommend it for both garden and field culture. Packet, 5c; oz., 10c; ¼ lb., 15c; lb., 40c.

Improved or 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. A very heavy cropper; the roots are smooth, with a deep hollow crown and a small top. The flesh is fine grained and sweet and of excellent quality; cooks evenly all the way through to the center, which is fine, soft and even quality as outside portions. PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

HOLLOW CROWN
PARSNIP.

Garden Peas

One Quart Will Plant About 100 Feet of Drill. 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 garden in 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 and planting frequently for succession will give us a full supply of the choicest green peas almost during the entire season, with the possible exception of the hottest part of the summer. Open furrows three or four inches deep and three feet apart; scatter the seed peas into them and cover with hoe or plow. Cultivate like corn or beans. The late tall sorts may be planted in double rows and brush stuck in between for support. All garden peas, however, require good, strong and fertile land. Heavy yields cannot be obtained on poor soil.

NOTE: While our supply of peas is limited, owing to unfavorable growing conditions, yet we can supply the very best of quality. Owing to crop shortage we are unable to quote prices on large quantities in this catalogue, consequently we would advise that all of our customers who intend planting quantities write us for lowest quotations before placing their orders.

Prices on packets, pints and quarts are postpaid. If ordered by freight or express, at sender's expense, deduct 7c per pint, 15c per quart, from prices given.

Ratekin's New Wonder.

A round seeded hard shelled 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.

Ratekin's New Wonder is unequalled for general excellence, size of pod and regularity of ripening. It grows 2½ feet high and produces pods of good size, which are well filled with round smooth peas of splendid flavor. It is a very heavy yielder and in this last feature, with its extreme earliness, lies its great value to market gardeners and truckers. At the same time it is one of the best for private garden. Packet, 10c; ½ pint, 20c; quart, 50c; by express, peck, \$2.00.

Ratekin's New Wonder.

Salem, Ky
Gentlemen: I have ordered and received seeds from you for the past few years, and they have always proved satisfactory. I am sending you my order again for seeds, and am sure I will receive first-class seeds.

Very truly,

E. CHAMPION.

SEE SPECIAL PRICES AND RATES ON PACKET
SEEDS AND COLLECTIONS ON PAGES 85-86.

Peas

Alaska Height two feet, pods rather small, dark green color, well filled, the earliest pea known, being two days earlier than the Rural New Yorker, and 70 per cent of the pods can be gathered at the first picking. **PRICE:** Pkt., 5c; ½ pt., 15c; pt., 25c; qt., 40c. By express: Half pk., \$1.25.

American Wonder The most popular extra-early variety for the family garden; being very sweet, it cannot be planted quite as early as the above, as it will not stand as much cold, wet weather, but is far superior to the extra early smooth sorts in flavor and table qualities, and is quite productive. Of dwarf and robust habit, growing about ten inches high, and produces a profusion of good sized, well filled pods, fairly packed with the finest flavored peas; on good soil each vine will average twelve pods and each pod six peas. The vines grow from eight to twelve inches high. **PRICE:** Pkt., 5c; ½ pt., 15c; qt., 40c. By express: Half pk., \$1.25.

First and Best A standard first early variety; popular with gardeners in all parts of the country. This variety is perhaps more largely grown by market gardeners for first early than any other. Crop is very short this year. **PRICE:** Pkt., 5c; ½ pt., 12c; qt., 35c. By express: Half pk., 90c

Premium Gem Height one foot; early and prolific; a type of and an improvement on the McLean Little Gem; pods long and of dark green color. The most popular sort for family use. **PRICE:** Pkt., 5c; ½ pt., 15c; qt., 45c. By express: Half pk., \$1.10.

Nott's Excelsior A superb new variety and we are sure our customers will welcome it as an ideal family and market pea. It is fully as sweet and delicious as the American Wonder, and grows one-half taller. Pods are larger and it is far more productive than the Premium Gem, and it is within a day or two as early as the first early smooth pea. The peas are ready for table use within forty-three days from planting. Quality very superior. **PRICE:** Pkt., 5c; ½ pt., 15c; qt., 45c. By express: Half pk., \$1.25; pk., \$2.25.

Everbearing Height 2 feet; late to very late; hardy, vigorous, enormous cropper. Pods and peas of large size and good quality. **PRICE:** Pkt., 5c; ½ pt., 15c; qt., 45c. By express: Half pk., \$1.00.

Gradus or Prosperity One of the finest peas for family use. This remarkable pea is not only large and of the best quality, but it is nearly or quite as early as the small, round, extra early sorts. **GRADUS** is a wrinkled pea with a vine growing about thirty inches high. The pods are of a bright green color, and measure four inches or more in length, as large as Telephone, and equally well filled with luscious peas—eight to ten or more in a pod. The peas are of the highest table quality and retain in a remarkable manner their color and attractive appearance after cooking. It is a grand pea in all respects. **PRICE:** Pkt., 10c; ½ pt., 15c; qt., 55c. By express: Half pk., \$1.50.

Telephone Immensely productive, of the finest quality and excellent sugary flavor; vines very strong, the pods are of large size, with six or seven delicious peas; height four feet. **PRICE:** Pkt., 5c; ½ pt., 15c; qt., 50c. By express: Half pk., \$1.00.

Mammoth Luscious Sugar This new sugar pea bears pods much larger than any other variety, often six or seven large, delicious peas; height four feet. **PRICE:** Pkt., 5c; ½ pt., 15c; qt., 50c. The peas and pods eaten together, as they contain so much sugar, starch and gluten; are very nutritious for family use. **PRICE:** Pkt., 5c; ½ pt., 15c; qt., 50c. By express: Half pk., \$1.25.

Improved Stratagem Late variety for family or market use. Half-dwarf, vigorous, branching habit, and under favorable conditions an enormous cropper. Pods long and filled with seven to nine large peas of extra fine quality. **PRICE:** Pkt., 5c; ½ pt., 15c; qt., 50c. By express: Half pk., \$1.25.

Champion of England One of the richest, best flavored peas grown. **PRICE:** Pkt., 5c; qt., 50c. By express: Half pk., \$1.25.

Bliss Everbearing Height two feet; late to very late, hardy, enormous cropper; pods and peas large size and good quality. **PRICE:** Pkt., 5c; ½ pt., 15c; pt., 20c; qt., 35c.

Yorkshire Hero (Big Gem). Height one and one-half feet. Seeds large, yellowish green and quality fine. **PRICE:** Large pkt., 5c; qt., 40c. By express or freight: Qt., 25c; ½ pk., \$1.85.

Tom Thumb This variety was introduced years ago. Vine bushy, growing to a height of ten feet; foliage heavy; productive, matures in thirty-five days after sprouting. **PRICE:** Half pt., 15c; qt., 50c.

Marrowfat Is grown largely by gardeners and also sown as a field pea for stock. **PRICE:** Pk., 5c; pt., 25c; qt., 45c. By express: Half pk., \$1.00.

Field Peas See list of Miscellaneous Field Seeds.

Gradus Pea.

Improved Stratagem.

Dear Sir: I have just received my seeds this morning and they were sure fine. I am well pleased with them. Thanks for the prompt attention given my order. Very truly,

A. KRUTZ.

Ratekin's Radish

Scarlet Olive.

Rosy Gem.

Ne Plus Ultra.

French Breakfast.

radish of good size it vies in earliness with the first forcing sorts. It will produce a radish three and one-half to four inches long in twenty-two days from sowing the seed. The leaves are short, admitting of close planting in the hotbeds. The flesh is very white, crisp and brittle as glass, and of fine mild flavor. PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Improved Chartier

Is decidedly distinct in appearance from any radish in cultivation. Its form is well defined by our engraving, the color at the top being crimson, running into pink about the middle and from thence downward is a pure waxy white. PRICE: Same as Early Scarlet Turnip.

French Breakfast

A small, handsome variety of very quick growth; one-half inch in diameter and two inches long. Color bright carmine, with clear white in lower portion. PRICE: Packet, 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

Ne Plus Ultra

An improvement on the "Deep Scarlet Turnip." Remarkably fine in quality, of very quick growth, and ready to pull within twenty days after sowing. Perfectly globular little roots of very bright color and excellent shape; certain to insure ready sale on the market. It is one of the best strains of early radishes for forcing. Beds are planted, the crop matured and sold and the beds ready for a second planting, all in thirty days. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Rosy Gem

An improvement on the "Scarlet Turnip White Tip." Their shape is perfectly globular, with rich, deep scarlet top, blending into pure white at the bottom, exceedingly tender, crisp, delicious, equally desirable for either the market or home garden. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Early Scarlet Turnip

One of the handsomest of the turnip radishes and a great favorite in many large markets for early planting outdoors. It is but little later than the "White Tipped Forcing" and will give entire satisfaction where extreme earliness is not the primary object. Roots slightly flattened on the under side; color very deep scarlet with a white tip; flesh white and of the best quality. Packet, 5c; ¼ lb., 15c; lb., 50c.

Early Long Scarlet Short Top

An old standard variety of quick growth, with long, slender roots. Radishes are ready for market about twenty-five or thirty days after planting seed; fresh, crisp and mild. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

White Strasburg

Of handsome, oblong, tapering shape, both skin and flesh are pure white. The flesh is firm, brittle and tender, and possesses the most desirable character of retaining crispness even when old and large. Excellent for summer use and withstands severe heat and grows very quickly. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Early Frame

Smaller and about ten days earlier than "Long Scarlet," which it very much resembles. PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

White Lady Finger

An improvement on "White Naples," or "Vienna." Large, white crisp variety, about as large as "Long Scarlet" and similar in shape. A very desirable sort. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

Scarlet Turnip, White Tip

Handsome bright scarlet, white tip. Many gardeners make sowing of it every two weeks during summer; its fine appearance attracts customers; quality always pleases. PRICES: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

Cincinnati Market

Early Scarlet Olive

A very useful variety. Matures in twenty-five days: color bright scarlet, flesh crisp and tender. Best adapted for main crop. PRICE: Large pkt., 50c; oz., 10c; ¼ lb., 15c; lb., 50c.

Ratekin's Radish Mixture

A superb mixture of all kinds of radishes, early, medium, fall, winter, Chinese, etc. Sow a row of it and it will furnish you delicious radishes throughout the year. The early and medium ones, as they mature and are pulled, make room for the larger growth of the fall and winter varieties. This mixture is made up of twelve best varieties, and with it it is necessary to make but one sowing for the entire year. You will be surprised and delighted with our popular radish mixture. PRICE: Pkt., 10c; oz., 15c; ¼ lb., 20c; lb., 60c.

Long White

A late and hardy variety of large size. Skin very dark brown or black. Keeps well during the winter. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

California Mammoth White

Pure white about one foot long and two or three inches through, tapering regularly to the tip. The flesh is tender and crisp, keeping well through the winter. PRICE: Large packet, 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Black Spanish

A late and hardy variety of large size. Skin a very dark brown or black. Keeps well during the winter. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

Rose China Winter

Of excellent quality and a good keeper. Skin a bright rose color, flesh very crisp and brittle. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

One ounce for 100 feet of drill; eight to ten pounds, for an acre.

Radish seed should be sown in light, rich soil as early as the ground can be worked, and for a succession at intervals of two weeks until midsummer. Radishes must be grown quickly and have plenty of room or they will invariably be tough and pithy. Sow in drills one foot apart and thin to two or three inches apart as soon as the rough leaves appear. Most of our radish seed was grown for us in France, "the natural home of radishes," and we think it cannot be surpassed.

Icicle (See drawing from nature on back cover.) A new early white radish. This magnificent novelty received its name from the almost transparent whiteness of the root. Although a long

radish, it is one-half to four inches long.

Its form is well defined by our engraving, the color at the top being crimson, running into pink about the middle and from thence downward is a pure waxy white.

PRICE: Same as Early Scarlet Turnip.

A small, handsome variety of very quick growth; one-half inch in diameter and two inches long.

Color bright carmine, with clear white in lower portion. PRICE: Packet, 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

An improvement on the "Scarlet Turnip White Tip." Their shape is perfectly globular, with rich, deep scarlet top, blending into pure white at the bottom, exceedingly tender, crisp, delicious, equally desirable for either the market or home garden.

PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

One of the handsomest of the turnip radishes and a great favorite in many large markets for early planting outdoors.

It is but little later than the "White Tipped Forcing" and will give entire satisfaction where extreme earliness is not the primary object.

Roots slightly flattened on the under side; color very deep scarlet with a white tip; flesh white and of the best quality.

Packet, 5c; ¼ lb., 15c; lb., 50c.

An old standard variety of quick growth, with long, slender roots.

Radishes are ready for market about twenty-five or thirty days after planting seed; fresh, crisp and mild.

PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

Of handsome, oblong, tapering shape, both skin and flesh are pure white.

The flesh is firm, brittle and tender, and possesses the most desirable character of retaining crispness even when old and large.

Excellent for summer use and withstands severe heat and grows very quickly.

PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Smaller and about ten days earlier than "Long Scarlet," which it very much resembles.

PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

An improvement on "White Naples," or "Vienna." Large, white crisp variety, about as large as "Long Scarlet" and similar in shape.

A very desirable sort. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

Handsome bright scarlet, white tip. Many gardeners make sowing of it every two weeks during summer;

its fine appearance attracts customers; quality always pleases.

PRICES: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

A very useful variety. Matures in twenty-five days: color bright scarlet, flesh crisp and tender.

Best adapted for main crop. PRICE: Large pkt., 50c; oz., 10c; ¼ lb., 15c; lb., 50c.

A superb mixture of all kinds of radishes, early, medium, fall, winter, Chinese, etc.

Sow a row of it and it will furnish you delicious radishes throughout the year.

The early and medium ones, as they mature and are pulled, make room for the larger growth of the fall and winter varieties.

This mixture is made up of twelve best varieties, and with it it is necessary to make but one sowing for the entire year.

You will be surprised and delighted with our popular radish mixture. PRICE: Pkt., 10c; oz., 15c; ¼ lb., 20c; lb., 60c.

A late and hardy variety of large size. Skin very dark brown or black.

Keeps well during the winter. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

Improved Chartier

Scarlet Turnip White Tipped

Salsify or Vegetable Oyster

(One ounce will sow fifty feet of drill; eight pounds to the acre.)

Why don't you sow salsify? We are certain if you grew it one year you would never be without it. It is one of the most delicious and nutritious of vegetables, and should be more generally cultivated for use in winter, when the supply of really good vegetables is so limited. It has the true oyster flavor, and makes a delicious and inexpensive substitute for them in soup. Cultivate like parsnips.

Mammoth Sandwich Island

Average fully double the size of the old Long White. Roots are white, smooth, and, notwithstanding their enormous size, are of superior quality. PRICE: Pkt., 5c; oz., 15c; ¼ lb., 35c; lb., \$1.10.

Wisconsin Golden

A distinct and valuable new sort. The roots are large, smooth and have a decided yellow cast, which gives it its name. They cut smooth and even throughout, unusually brittle and never stringy. When prepared for the table they are very rich, tender and delicious in flavor. PRICE: Pkt., 5c; oz., 15c; ¼ lb., 50c; lb., \$1.60.

Spinach

One ounce will sow about eighty feet of drill; 10 lbs. to the acre.

The finest "greens" of any plant in cultivation. For summer sow early in spring in deep, rich soil in drills one foot apart; cover one inch; sow at intervals of two weeks throughout the season. For very early spring use sow the first of September; protect by covering with straw.

Victoria

This new variety is distinguished for its exceedingly dark black-green color, and also for its very long standing qualities, being from two to three weeks later than the ordinary varieties. The leaves are thick and spread out flat upon the ground. It is excellent for spring sowing, but not sufficiently hardy to withstand the winter in this locality. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 35c.

Bloomsdale

A savory-leaved curled variety. Very highly valued; especially in the South. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 40c.

New Zealand

Very useful to supply the place of the ordinary spinach during the very hottest months of the year, or in dry, arid localities. A few plants will supply a family with this delicious vegetable from July to October. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Victoria Spinach.

CULTURE: Sow seed as soon as danger of frost is over; use wood ashes on seed bed. Pulverize soil of seed bed thoroughly. When plants are six inches high transplant into hills four or five apart each way, and cultivate frequently. An ounce of seed produces sufficient plants for an acre.

Big Havana

An improved Havana tobacco, larger than the old sort. It is one of the earliest. Fine texture and superior flavor. PRICE: Pkt., 10c; oz., 35c; ¼ lb., \$1.25; lb., \$4.00.

Improved Yellow Oronoko

Produces the best yellow type. Long, broad leaf. For wrappers and cutters; also cigarettes. PRICE: Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

Improved White Stem Oronoko

It has a large leaf and is of the finest texture. It cures the finest yellow. PRICE: Pkt., 10c; oz., 40c; ¼ lb., \$1.10; lb., \$4.00.

Improved Long Leaf Gooch

One of the best for growing on light or sandy soils. Has a long, tapering leaf of fine texture. PRICE: Pkt., 10c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

Sumatra

Fine texture and small fibre. Grown for its superior quality for cigar wrappers. Best stock. PRICE: Pkt., 15c; oz., 75c.

Vuelta De Abajo

The finest, silkiest and highest flavored Havana tobacco grown. A fine cigar variety. PRICE: Pkt., 15c; oz., 75c.

Connecticut Seed Leaf

Grown in all sections of the United States and extensively in Connecticut. Broad leaf of medium length. Suitable for cigar fillers. PRICE: Pkt., 10c; oz., 25c; ¼ lb., 90c; lb., \$3.00.

Sweet Oronoko

A favorite sort, producing the finest fillers. When sun cured it makes the best natural chewing leaf. PRICE: Pkt., 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

The Primus

This is the earliest tobacco grown. It will ripen even in Canada. Leaves large, fibre fine, texture silky, flavor superior. It makes an elegant smoking tobacco, either for cigars or pipe. PRICE: Pkt., 10c; oz., 30c; ¼ lb., 85c; lb., \$3.00.

Improved White Burley

The Western favorite, superior to the old variety of Burley. Makes better color; commands higher prices. PRICE: Pkt., 10c; oz., 30c; ¼ lb., \$1.00; lb., \$3.50.

Improved Gold Leaf

A bright sort for plug wrappers, cutters and fillers. The plants grow to good size. Leaf long and medium broad; fine and silky. PRICE: Pkt., 10c; oz., 50c; ¼ lb., \$1.50; lb., \$5.00.

Mammoth Sandwich Island.

New Ideal Mammoth Rhubarb

The Rhubarb (or pie plant), is a vegetable which it is difficult to improve, and it takes many years to fully establish a new variety. About twenty-five years ago Dr. Kennicott of Illinois, in growing roots from seed, found one which was so far superior to, and different from, all others that he saved it carefully, and the root has been divided and propagated from year to year until finally we purchased the stock. Like all other highly improved sorts it seeds sparingly and comes more nearly true to name when grown from the seed than most other sorts. The stalks are as large as, if not larger than, the Victoria, and are produced in much greater abundance. PRICE: Pkt., 5c; oz., 15c; ¼ lb., 40c; strong roots, 20c each; doz., \$2.00.

Tobacco

Rhubarb.

New GOLDEN HUBBARD SQUASH

PRODUCTIVE
EARLY
BEAUTIFUL
GOOD

Squash

The squash is one of the most nutritious and valuable of all our garden vegetables. Few farmers appreciate the value of winter squash as food for stock. We think an acre of squash costing no more to cultivate and much less to secure will give as much food available for feeding stock as an acre of corn, and we strongly urge our readers to try a "patch" for this purpose. One ounce of early varieties will plant about forty hills; one ounce of late varieties will plant about twenty hills; three to four pounds to the acre.

New Golden Hubbard Squash.

Productive, Early, Beautiful, Good. This is a True Hubbard Squash, except in color, which is bright golden. The vine is a vigorous but not a rampant grower and very

productive. The shell is warty, hard and strong, and a very beautiful orange-red, except for a bit of olive green on the blossom end. The flesh is a deep orange and uniformly so to the rind, never having the green tinge so objectionable in other sorts. It cooks very dry, fine grained and good flavored. We believe this is the best fall and winter sort yet introduced, and that it deserves to and will become a most popular variety. It certainly has no superior as a table squash. Send to RATEKIN'S for the best seed. PRICE: Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

There is no vegetable you will appreciate more than our early squashes. Try them.

Early Bush Crookneck.

Splendid summer sort, early, productive, very fine quality. With all the new varieties recently brought out, many claim that there is no summer squash superior to this.

PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; 1 lb., 65c.

White Bush Scalloped.

Similar to the Golden Bush; color creamy white; an excellent variety for the family garden for early use. PRICE: Packet, 5c; oz., 10c; ¼ lb., 25c; lb., 75c.

True Hubbard.

This old variety has for years 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 of rich flavor; keeps in perfect condition throughout the winter. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., \$1.00.

Warty Hubbard

A new strain of the Hubbard. The wartiness indicates a keeping squash. It also denotes extra choice quality—the harder and more warty the shell of a Hubbard, the more delicate and sweet the flesh. The flesh, however, is not as thick as the above. Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 90c.

Blue Hubbard or Marblehead

A splendid winter variety. Shell very hard, light blue color; flesh similar to the Hubbard in quality. Packet, 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Sibley or Pike's Peak

We consider this one of the very best winter varieties. It has the reputation of being the only variety surpassing the Hubbard in quality. Has large oval fruit, tapering at the blossom end. Shell hard, dark olive green color, flesh light orange color, of the very best quality. Vines of strong growth and very productive. Seed has been very scarce for several years past, but we have a good supply. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 30c; lb., 90c.

Warty Hubbard.

Ratekin's "Home Garden" Collection

\$1.50 GETS THIS COMPLETE COLLECTION DELIVERED FREE AT YOUR DOOR.

40 Best Varieties of Vegetable Seeds, Including Nine 1-3 Pint Packages of Beans, Peas and Sweet Corn.

THE BIGGEST AND BEST BARGAIN EVER OFFERED BY ANY SEED HOUSE.

1-3 pint Beans, Improved Golden Wax
1-3 pint Beans, Long Yellow Six Weeks
1-3 pint Beans, Kentucky Wonder
1 large packet Beet, Early Eclipse
1 large packet Beet, Long Blood
1 large packet Cabbage, Early Jersey Wakefield
1 large packet Cabbage, Ratekin's Autumn King
1 large packet Carrot, Danver's Half Long
1 large packet Celery, Golden Self Blanching
1 large packet Cucumber, Cool and Crisp
1 large packet Cucumber, Chicago Pickling
1-3 pint Sweet Corn, Peep O' Day
1-3 pint Sweet Corn, Evergreen
1-3 pint Pop Corn, Golden Queen
1 large packet Egg Plant, Early Round Purple
1 large packet Endive
1 large packet Lettuce, Early Curled Simpson
1 large packet Lettuce, Grand Rapids
1 large packet Muskmelon, Osage

1 large packet Watermelon, Cole's Early
1 large packet Watermelon, Kleckley Sweet
1 large packet Onion, Red Wethersfield
1 large packet Onion, Yellow Globe
1 large packet Parsley
1 large packet Parsnip, Hollow Crown
1-3 pint Peas, Alaska
1-3 pint Peas, Gradus
1-3 pint Peas, Telephone
1 large packet Pepper, Bull Nose
1 large packet Pumpkin, Pie
1 large packet Radish, Improved Chartier
1 large packet Radish, Improved Chartier
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 Milan

This collection is already put up in packages and cannot be changed. Not subject to any premium or discounts offered elsewhere.

Special Rates on Seeds in Packets

THIS OFFER IS BY MAIL, POSTAGE PAID BY US, TO ANY POSTOFFICE IN THE UNITED STATES.

For remittance of \$1 you may select seeds, in packets only, valued at	\$1.25
For remittance of \$2 you may select seeds, in packets only, valued at	2.60
For remittance of \$3 you may select seeds, in packets only, valued at	4.00
For remittance of \$4 you may select seeds, in packets only, valued at	5.60
For remittance of \$5 you may select seeds, in packets only, valued at	7.00

SPECIAL COLLECTION OF VEGETABLE SEEDS

The collections as offered do not admit alteration, because they are put up all ready to ship in advance of the busy season, thus enabling us to offer them at much less than the varieties would cost separately.

Collection A

36 Packets of Choice Vegetables.	1 Packet Wardwell's Wax Bean.	1 Packet Lettuce, Hanson.	1 Packet Pumpkin, Sugar.
A Complete Vegetable Garden for	1 Packet Pole Lima Bean.	1 Packet Lettuce, Prize Head.	1 Packet Radish, Icicle.
	1 Packet Beet, Half Long Blood.	1 Packet Muskmelon, Rocky Ford.	1 Packet Radish, Early Scarlet Globe.
	1 Packet Beet, Eclipse.	1 Packet Muskmelon, Jenny Lind.	1 Packet Salsify, or Vegetable Oyster.
	1 Packet Cabbage, Early Jersey Wakefield.	1 Packet Watermelon, Ice Cream.	1 Packet Spinach, Victoria.
	1 Packet Cabbage, Premium Flat Dutch.	1 Packet Watermelon, Dixie.	1 Packet Squash, Mammoth Crook-neck.
	1 Packet Cauliflower.	1 Packet Onion, Yellow Globe Danvers.	1 Packet Squash, Hubbard.
	1 Packet Carrot, Danvers.	1 Packet Onion, Prize Taker.	1 Packet Tomato, Magi Queen.
	1 Packet Celery, White Plume.	1 Packet Parsley, Moss Curled.	1 Packet Turnip, Purple Top White Globe.
	1 Packet Corn, Mammoth White Cory.	1 Packet Parsnip, Hollow Crown.	
	1 Packet Corn, White Evergreen.	1 Packet Peas, Nott's Excelsior.	
	1 Packet Cucumber, Emerald.	1 Packet Peas, Champion of England.	
	1 Packet Cucumber, Arlington White Spine.	1 Packet Pepper, Sweet Mountain.	

\$1.00

COLLECTION B—17 Packets Choice Vegetable Seed. Postpaid 50 Cents

Beet, Davis Wax Bean, Charleston Cabbage, Danvers Carrot, Giant Pascal Celery, Metropolitan Corn, Early Cluster Cucumber, Denver Market Lettuce, Osage Muskmelon, Fordhook Early Watermelon, Yellow Globe Danvers Onion, Hollow Crown Parsnip, French Breakfast Radish, Dwarf Telephone Pea, Spark's Earliana Tomato, Sibley Squash, White Egg Turnip.

Flower Seed Collections

From early childhood we have been passionately fond of flowers. The summer days were always spent in our home garden. Great beds of Phlox, Pansies, Verbenas, Portulaca, Sweet Williams, Four-o'Clocks, Candytuft, Balsam, etc., were our daily delight. Our boyhood was spent in the garden (our father being a gardener and truck grower), our young manhood found us there; indeed, there is no place we feel so completely at home as when surrounded with plants and flowers. We have for long years tested every flower obtainable, and our list is full of choice sorts—and we pride ourselves that no flower seeds offered in America have a higher reputation among gardeners and all lovers of beautiful blossoms than our Choice Northern grown, sure to grow, Flower Seeds.

Nine-tenths of the failures in the flower and vegetable garden occur from improper sowing and treatment. We want everybody buying our seed to have success with them, and we urge upon them to carefully read and study the culture of flowers.

SOIL—Prepare this carefully; have it smooth, fine, mellow and well enriched. It is well to choose a sunny location south of the house; make your seed bed even by means of a smooth board. Do not sow on wet, cold soil—have it warm and mellow. Put a little stick at each end of each row, so as to mark it, and pull all the weeds that appear between the rows the first day they can be seen. When plants are large enough, remove same where you want them to remain, and they will reward you with flowers all summer and gladden your heart.

A MAGNIFICENT FLOWER GARDEN FOR \$1.00

(net), for only \$1.00. This collection contains the cream of all flower seeds and cannot be broken. It's what you will need if you want a great garden of choice flowers.

1. Abronia.	9. Balsam.	17. Dianthus.	25. Lupinus.	33. Portulaca.
2. Anchusa.	10. Celosia.	18. Eschscholtzia.	26. Marigold.	34. Ricinus.
3. Ageratum.	11. Calliopsis.	19. Forget-Me-Not.	27. Mignonette.	35. Stock.
4. Alyssum.	12. Candytuft.	20. Gaillardia.	28. Nasturtium.	36. Sweet Peas.
5. Amaranthus.	13. Canterbury Bell.	21. Gypsophyla.	29. Nigella.	37. Scabiosa.
6. Antirrhinum.	14. Chrysanthemum.	22. Helichrysum.	30. Pansy.	38. Verbena.
7. Asters, early.	15. Centaurea.	23. Hollyhock Annual.	31. Phlox.	39. Vinca.
8. Asters, late.	16. Cosmos.	24. Linum.	32. Poppy.	40. Zinnia.

Above 40 Brilliant Annuals Only \$1.00, Postpaid

brilliant, beautiful, free flowering annuals. They surely will bear bushels of flowers during a summer.

50 CTS. These nineteen packages, brilliant varieties, 50c postpaid.

1. Asters.	6. Cosmos.	7. Dianthus.	10. Gypsophyla.	13. Marigold.	16. Petunia.	19. Zinnia.
2. Balsam.	4. Candytuft.	8. Eschscholtzia.	11. Larkspur.	14. Mignonette.	17. Phlox.	
3. Bartonla.	5. Celosia.	9. Four o'Clock.	12. Lobelia.	15. Pansy.	18. Poppy.	

All for 50c

Climbing Flower Collection

Hardy, annual, rapid-growing climbers.—Balloon Vine, Canary Bird Vine, Cypress Vine, Humulus, Variegated; Dolichos, Hyacinth Bean; Morning Glory.

Six Packages for 25c, Postpaid.

Sweet Scented Flower Collection

Charming, hardy, garden flowers easily grown from seed, which will fill the air with their sweet fragrance—Alyssum, Ocean Spray; Carnation, Giant, Marguerite Mixed; Matthiola, Evening Scented Stocks; Stocks, Large Flowering Mixed; Sweet William, Mixed; Mignonette, Snow Queen; Heliotrope, Mammoth, Mixed; Sweet Sultan, Mixed; Candytuft, Fragrant; Sweet Peas, Cupid, Mixed.

Ten Packages for 25c, Postpaid.

Perennial Flower Collection

This collection is composed of the following old fashioned, hardy flowers: Aquilegia, Mixed; Campanula, Cup and Saucer; Carnation Marguerite; Coreopsis; Daisies, Mixed; Delphinium, Mixed; Forget-Me-Not, Palustris; Gaillardia, Grandiflora; Poppy, Oriental, Mixed; Sweet William, Mixed.

Ten Packages for 30c, Postpaid.

The Bon Ton Collection

Postpaid, 75c.

Composed only of the very choicest, finest, rarest mixtures of their kind.

- Pkg.
- 1 Asters, Salzer's Giant Branching, Mixed.
 - 1 Balsam, The King.
 - 1 Carnation, Perpetual.
 - 1 Celosia, Prize Winner.
 - 1 Dimorphotoca.
 - 1 Mignonette, Victoria.
 - 1 Perpetual Nasturtium, Dwarf Mixed.
 - 1 Petunia, Ruffled Giants.
 - 1 Pansy, Mam. Butterfly.
 - 1 Phlox, Fireball.
 - 1 Salvia, Fireball.
 - 1 Sweet Peas, Grand Orchid, Mixed.
 - 1 Verbena, Mammoth, Mixed.

A total value of \$1.85, which will be sent

Postpaid for but 75c

For 25 Cents

Here is a fine complete Flower Garden Collection: It is composed of one package each of the following:

- 1. Acroclinium.
- 2. Ageratum.
- 3. Calliopsis.
- 4. Morning Glory.
- 5. Feverfew, White.
- 6. Nasturtium.
- 7. Sweet Peas.
- 8. Pansy.
- 9. Petunia.
- 10. Poppy, Shirley.

In all ten packages, for only 25 cents, postpaid. A pleased lady wrote us: "The 25c Flower Seed Collection gave me three bushel baskets full of blossoms during last year."

These ten packages are beauties and will please you.

Postpaid for 25c.

Ratekin's New Tomato---The "Magi Queen"

These Letters Tell the True Story

WINNER OF FIRST PRIZE.

Vicksburg, Miss.

J. W. Ratekin, Shenandoah, Iowa.

My Dear Sir: Yours of August 29th came just as we were starting for a short visit at Waterloo, Iowa, from which we returned last Wednesday evening. Was much pleased, of course, both at being adjudged a "good Indian" and at winning the name prize—as to which Mrs. Longley played it low down on me by asking before showing me your letter, but after reading it, if she could have the \$10.00 in case I won it. Of course I said "yes," thinking a one in a thousand chance offered great opportunity for cheap generosity. With best regards I am, sincerely yours,

C. L. LONGLEY.

WINNER OF SECOND PRIZE.

Mesquite, Texas.

J. W. Ratekin, Shenandoah, Iowa.

Dear Sir: I am pleased beyond measure to say that I have received your letter with \$5.00 check which was awarded me for my description of the Nameless Tomato. I am also highly pleased to know that my name for this tomato was your second choice, and while I regret that I was not the winner, yet I have no doubt but what your selection of name is one that will better advertise the tomato.

You will find enclosed list of names which I think will be glad to receive your 1912 catalogue, and which I believe will do some business with you. With best wishes I beg to remain, yours very truly,

R. L. KIMBROUGH,
Cashier First National Bank.

The Magi Queen as grown on our trial grounds.

form on the bush in clusters of handlike shape and it was not an infrequent thing to see as many as a dozen tomatoes in one cluster. I took notice that several of my bushes had as many as eighteen clusters on one bush.

"The NAMELESS SIZED UP FROM EVERY STANDPOINT 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 or introduced. It's a healthy, thrifty, rapid growing tomato, one that never blights, rots or spots. The plants are very compact, with stout, close jointed branches, which set the 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: Per pkt., 15c; oz., 50c; ¼ lb., \$1.50; ½ lb., \$2.25; 1b., \$4.00.

(Continued on next page.)

Camp Crook, S. D.

Dear Sir: The name I suggest for your new tomato is "THE CHAMPION." I went into the garden one morning and found the first ripe tomato and I was so delighted. Will say the growth was rapid and ahead of other vines that were planted far ahead of them, stalk and leaves very vigorous, and for that reason stand the Dakota winds better than any other variety. Fruit is smooth and mealy. I wish you success. Yours truly,

MARY KENLEY.

Gorden, Wis.

Dear Sirs: I planted some of your new tomatoes May 20th they came up the 25th, and I believe that every seed grew. The weather conditions were very unfavorable, it being alternately wet and then dry, but in view of this your Nameless tomato ripened earlier and was much better flavored than four other varieties planted at the same time. Yours very truly,

RUTH GRATREAKS.

Olive Springs, Roan County, Tenn.

In suggesting a name for your tomato, I want it named "THE CHAMPION." I weighed one of these tomatoes that weighed one pound and ten ounces and there was a lot of them that weighed a pound and a half. Truly yours,

MRS. LOVINA RUSSELL.

Thornwood, W. Va.

Dear Sir: I have raised your Nameless tomato and find them to be the earliest tomato I have ever tried and cannot be excelled in quality by any other tomato. Yours truly,

H. KISNER.

Hanna City, Ill.

Kind Sir: In regard to your new tomato, they are more equal in size and better flavored than any tomato I have ever raised. Has a very thin skin and is very meaty. It is also a fine tomato for preserving and canning and a splendid keeper. Yours very truly,

MRS. FRED E. SMITH.

Montezuma, Kansas.

Dear Sirs: Your "Nameless Tomatoes" are the best I have ever grown. The seed all came up and bore the finest tomatoes much earlier than any I ever saw before. I can beat the samples represented in your catalogue and the tomatoes are sweeter and meatier than any I ever ate. My tomatoes were raised in Gray County, Kansas, without irrigation, and are earlier, meatier and more prolific than any I have ever grown. Yours truly,

THOMAS BIRD.

Tomatoes

(Continued from Page 87.)

THE EARLIEST, FIRM SOLID, THICK FLESHED TOMATO GROWN.

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

From a true photograph of the new "MAGI QUEEN" Tomato. PRICE: Pkt., 15c; oz., 50c.

Tomatoes One ounce produces about 2,000 plants; 2 ounces enough for an acre. For early crop sow in hotbeds in January or February. For late crop in open beds in May. Do not depend on one planting of tomato plants to extend the whole season through, as they should be planted both early and late for best results. Tomato as a field crop yields 300 to 500 bushels per acre.

CULTURE: Sow in a hotbed in early spring, or 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 to five feet apart each way.

Ratekin's Finest of All

If you sow "Ratekin's Finest of All" you will have fine tomatoes in 80 days from sowing the seed. It is an excellent shipper, being exempt from rot or cracking, ripens all over at once, and is a wonderfully smooth tomato—none smoother.

PRICE: Packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Ratekin's Beauty

THE BEST MAIN CROP TOMATO. Smooth, uniform, prolific, a long keeper and of the finest quality. Fruit is a glossy crimson, of 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 bear fruit until frost. A splendid keeper; ripe fruit fresh from the vine have been kept in perfect condition from three to four 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 the highest prices.

PRICE: Pkt., 10c; 3 pkts, 25c; oz., 30c; ¼ lb., 75c; lb., \$2.50.

Chalk's Early Jewel

The largest, smoothest and finest flavored, extra early bright red tomato. About ten days later than Spark's Earliana. It is even a heavier cropper, with tomatoes of larger size and sweeter flavor, produced throughout the season. Packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.75.

Ratekin's Finest of All.

Spark's Earliana

An extremely early variety of tomato, and produces large clusters of fair size fruits, which are very uniform in size and shape. It is hardy, and can be set out early. Color of flesh deep red, very solid and fine flavor. Packet, 5c; oz., 15c; ¼ lb., 40c; lb., \$1.35.

Acme

Early and bears fruit until cut off by frost. Fruit is purplish, always round, smooth and of good size, and is borne in clusters of four or five; free from cracks and stands shipment well. Flesh is solid and of excellent flavor. Excellent for home and market. Does well both outdoors and under glass. This is a good canning variety. Large packet, 5c; oz., 15c; ¼ lb., 50c; lb., \$1.50, postpaid.

(Continued on Page 89.)

Tomato—(Continued)

Ponderosa.

Ponderosa Although introduced many years ago, in all that time no tomato has ever surpassed the genuine Ponderosa in size or deliciousness, meaty flavor. It is not only the largest but heaviest tomato grown—sometimes growing to such a size that a slice will cover the bottom of a dinner plate. On account of its large size, very thick meaty flesh, and extra fine flavor, it is most desirable for home use or selling on fancy fruit stands, and a fine sort for exhibition purposes at county and state fairs. The color is a glowing crimson; shape very regular considering its size, and is considered by thousands of people the best variety for table use in existence for slicing, having but very few seeds. I offer the pure, genuine headquarters stock.

PRICE: Pkt., 10c; ½ oz., 20c; oz., 35c; ¼ lb., \$1.00; lb., \$3.50.

Livingston's Globe In shape this tomato is distinct from all others, being a beautiful globe. It ripens through and through; a fine glossy rose in color, tinged with purple; very productive. Packet, 10c; oz., 35; ¼ lb., \$1.00.

Livingston's Coreless Almost round, being of about the same diameter each way. Clusters of four to seven fruits are produced at six to eight inches apart along the stem, and all are of good size. A grand, good slicing variety, the seed cells being surrounded by bright red, heavy, meaty and delicious flesh. Packet, 10c; oz., 35c; ¼ lb., \$1.00.

June Pink The fruits grow in clusters, and begin to mature very early, measure three inches in diameter and are of excellent quality. It bears for a long season, until the vines are killed by frost. Packet, 10c; oz., 35c; ¼ lb., \$1.00.

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: Pkt., 5c; oz., 30c; ¼ lb., 85c.

Matchless Well worthy of its name, for in beauty of color and symmetry of form it is indeed without a peer. The vines are of strong, vigorous growth, well set with fruit; are entirely free from core; of the finest flavor, of a very rich cardinal red color and not liable to crack from wet weather; of largest size, and the size of the fruit is maintained throughout the season. Solid, a fine quality and keeps well. PRICE: Packet, 5c; oz., 25c; ¼ lb., 75c; lb., \$2.50.

Yellow Plum or Pear For pickling and preserves. Fruit uniformly oval, lemon colored and smooth skinned. PRICE: Packet, 5c; oz., 25c; ¼ lb., 25c; lb., \$2.25.

New Stone This is the heaviest and most solid fruited of the large tomatoes of good quality. Our stock is distinctly superior to most of that offered under this name, being more uniform, better colored and larger. Vines vigorous and productive. Fruit round, apple shaped, very large, very deep red in color and astonishingly heavy. PRICE: Packet, 5c; oz., 20c; ¼ lb., 65c; lb., \$2.25.

Extra Early Purple Top Milan

One of the earliest sorts in cultivation. The bulb is very flat, of medium size, quite smooth, with a bright purple top. PRICE: Packet, 5c; oz., 10c; ¼ lb., 20; lb., 60c.

Early White Milan

Much like the cut; it is pure white all over, instead of having purple top. Quite popular with gardeners. PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 60c.

Golden Ball or Orange Jelly

A very beautiful and bright yellow turnip of medium size. It is hardy and one of the best of keepers. Flesh extremely firm and solid. Always brings a good price in the market. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 50c.

THREE TABLE TURNIPS

Purple Top Globe Similar to above, except in shape. The largest yielder of any turnip on the list; desirable for table use or stock. PRICE: Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c; 5 lbs. or more, not prepaid, 35c lb.

Early Snowball A globe-shaped, white skinned turnip, which is exceedingly productive; very early and particularly adapted for family or market use. Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Purple Top Strap Leaved The standard for this part of the country for late planting. Round, flat, good sized, small top, good flavor. PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 50c; 5 lbs or more, not prepaid, 35c lb.

White Flat Dutch A variety of excellent quality. Good size and tender. PRICE: Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Ruta Baga or Swede Turnip, Imported Stock

CULTURE: Rutabaga seed should be sown three or four weeks earlier than that of the table varieties of turnips. The ground should be enriched with well rotted manure and the seed sown in drills two and one-half inches apart and thinned out to six or eight inches in rows. When the roots have fully matured and before severe weather sets in, pull, cut off the tops, and store them in a root cellar or pit.

Purple Top A large early sort of fine quality. Roots globe shaped, skin purplish red above ground and yellow below; flesh yellow; necks small. An excellent variety in every way. **PRICE:** Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 50c.

Monarch This grand, new distinct form of rutabaga is, we believe, by far the best of all. The bulbs are of tankard shape, with very small neck, skin dark red above ground and yellow below, fine grained and best quality. Only variety succeeding on our prairie soil. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c; 5 lbs. or more, not prepaid, at 35c.

Improved American Very solid, fine quality, valuable for the table and for feeding stock; good shape; smooth skin, small neck; keeps well; a choice strain. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 45c; 5 lbs. or more, not prepaid, at 30c.

White Sweet German Large size, oval form and very solid; flesh pure white and sweet. The best keeping variety. **PRICE:** Packet, 5c; oz., 10c; ¼ lb., 20c; lb., 50c; 5 lbs. or more, not prepaid, at 35c.

Carter's Imp. Hardy Swede Large size, excellent quality and immense yielder. **PRICE:** Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c; 5 lbs. or more, not prepaid, at 35c.

Garden and Farm Calendar

Information given here applies to climate and location. Allowances must be made according as they are early or later.

January Send order for seeds now, while stocks are full, so as to have them on hand as the sowing seasons come a round. We can ship later if desired. Prepare hot beds, start in them early Cabbage, Lettuce, Radish, Beet, Cauliflower, Onion and Pansy, and some other flower seeds which require transplanting. (See list under Flower Seeds).

February If not already sown start in hot beds or cold frames early Cabbage, Lettuce, Radish, Beet, Cauliflower, Onion, and flower seeds for transplanting; late in the month Egg Plants and Peppers. These require warmer beds than the other seeds mentioned.

Outdoors—The last of the month, if favorable weather, sow early Peas, Spring Kale, Beets, Spinach, Carrots, Celery, Radish and Parsley. Set Onions sets, Horseradish, Asparagus and Rhubarb. Plant trees and bush fruits. Sow Blue Ribbon Evergreen Lawn Grass. Prepare and sow Tobacco beds. Towards the end of the month sow Canada Field Peas with Oats for early hay. Clover and Grass seeds can be sown this month, also Rape for grazing and soiling.

March Seeds for early plants can now be started in cold frames or window boxes instead of hot beds. Tender seeds, such as Egg Plants, Peppers, and tender flower seeds, require a little more heat.

Outdoors—The sooner most hardy seeds are in, the better. We name them in the order in which they should be sown. Garden Peas in varieties for succession, Onion, Celery, Spinach, Leek, Parsley, Lettuce, Radish, Beet, Asparagus, Carrot, Parsnip and Salsify. Plant Irish Potatoes, Asparagus, Rhubarb roots and Onion sets if not already done. Set out Cauliflower, Cabbage, Onion and Lettuce plants from hotbeds after these have hardened by leaving the glass open at nights. Sow Herbs in a warm border. Sow Cabbage seed for summer crop. Sow the hardy kinds of flower seeds; also this is the proper month for sowing Lawn Grass.

For the Farm—Winter and Spring Oats, Canada Field Peas, with Oats, Clover seeds, Grass seeds of all sorts, Tobacco seeds, should all be sown quickly. Plant Artichokes for hogs, sow Dwarf Essex Rape.

April Seeds that have not previously been put in as recommended in the preceding months can still be sown, except that instead of using hot beds for hardy sorts of plants they can now be sown in beds in the open ground. Summer Cabbage, Lettuce, and Tomatoes should be sown for succession to follow the earliest sorts, likewise Beets, Radish, Peas. The first planting of Artichokes, Herbs, Corn, Snap Beans, and Okra can be made early this month, and Cucumber, Squash, Cantaloupe and Watermelon the latter part, if the weather is favorable; otherwise defer until May. Cabbage, Lettuce, Cauliflower, Onion and Beet plants, which have been started earlier, should be transplanted; also Strawberry plants set, as this is the best month. Sweet Potatoes can be put in hot beds previously used for Cabbage. Lawn Grass can still be sown, and all Clover and Grass seeds. Sow Mangel Wurzel and Stock Beets. Plant Corn for early crop.

May This is the month for sowing most tender seeds out of doors, and all other seeds which were not sown previously can still be put in out of doors. If Cucumber, Cantaloupe, Watermelon and Squash have not been planted put them in as early as possible. Snap Beans for succession, Lima and Pole Beans, first planting should be made early. Cabbage seed for fall and winter use should be sown about the 15th; also Black-Eye Peas for winter use. Set out plants for Tomato, Pepper, Sweet Potatoes and Egg Plant. Continue sowing flower seeds and plant bulbs.

For the Farm—Sugar Beets and Mangel Wurzel for winter feeding and stock can still be sown; also all Sorghums, Millet, Fodder Plants, Cow Peas, Soja, Navy and

Velvet Beans can be planted. Set out Tobacco plants latter part of the month. Keep down weeds and destroy the first crop of insects effectually.

June Set out Cabbage, Tomato, Egg Plant, Pepper, and Sweet Potato Plants. Sow Tomato for late crop; likewise late Cabbage and Cauliflower for winter use. Plant Okra, Watermelon, Cantaloupe, Cucumber, Squash, and Pumpkin for late use, and Snap and Pole Beans and Sweet Corn for succession.

For the Farm—Sow the Millets, Cow Peas, Sorghum, Soja Beans, Navy Beans, and plant late Corn. Mangel Wurzel Beets can yet be sown for stock, but the seed should be soaked twenty-four hours before sowing.

July Plant Snap Beans for succession and Sugar Corn for late roasting ears. Set out late Cabbage plants for winter use, likewise Celery plants. This is the best month to sow Rutabaga, and they do best in rows. Plant Cucumbers for pickling and table, and late Potatoes for winter use.

For the Farm—Sow German or Hungarian Millet for hay or fodder; likewise Corn in drills for ensilage or fodder. Buckwheat can be sown for bees as an improver of the soil, and for grain. Plant Navy Beans, Black, Black-eye and Whippoorwill Peas. Sow Crimson Clover at the last working of Corn.

August Continue planting Snap Beans for the table and pickles. If any Cabbage plants remain unplanted, put out at once; likewise Celery plants. Trim off the tops of Celery before planting, if the plants are large. Sow Lettuce seed for fall use; likewise Endive. Sow Spinach and Kale. Finish sowing Rutabaga seed. All kinds of Turnip seeds can be sown during this month. Crimson Clover is one of the best crops grown, and should be sown on every vacant place where crops have been cleared off; if it is not required for feed it will improve the soil equal to manure when turned under.

For the Farm—Buckwheat, Rye and Barley should be sown for fall and winter grazing, and afterwards will make a crop of grain.

September Our Fall Catalogue, issued about August 1st, gives full information about all seeds for fall sowing; mailed free upon request. Sow Lettuce, put out Onion sets, sow Winter Radishes, Spinach, Turnips, Mustard, Corn Salad and Kale. Dutch Bulbs, Hyacinths, Tulips, etc., can be planted toward the end of the month. Sow Evergreen Lawn Grass; nothing adds more to the attractiveness and beauty of a home than a nicely kept, green lawn.

For the Farm—Sow Crimson Clover this month. Winter Oats will do well sown this month, as they will get well rooted before winter. Sow all kinds of Grass and Clover seeds and Winter and Sand Vetch. Continue to grow Barley and Rye, as they are useful for winter grazing as well as for grain.

October Put out Onion sets. Sow Turnips for salad, Kale, Mustard, Spinach and Lettuce. Sow Lawn Grass seed. Fall seeding does better than spring seeding. Plant Hyacinths, Tulips, etc. Sow Pansy seed in cold frames for spring plants.

For the Farm—All kinds of grass and Clover seeds can be sown this month, but the earlier Clover seed is put in the better. Sow Wheat, Oats, Rye, Barley, Vetches.

November Sow Lettuce and early varieties of Cabbage in cold frames, leaving the glass off at the time to harden them. Set out Cabbage and Lettuce plants. Lawn Grass seed can yet be sown, but the earlier it is put in the better. All kinds of Flowering Bulbs set out in the fall can be put in this month.

For the Farm—Wheat, Rye, Barley, Timothy and Red Top seed can yet be sown, but the earlier they are put in the better.

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 seeds 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 and new crop grown, and of the very best obtainable. We very much regret that space will not admit of a complete illustration of all of them. We might add that we could have listed 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, tested and known to be first-class and of the best, hardiest 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.

You owe it to your children as well as yourself. They like flowers and turn instinctively to these pets of mother earth. Nature teaches the little ones many noble lessons through the flower garden. Give them a patch by 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.

Ratekin's 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. Dwarf Mixed colors. Pkt., 5c.

Express Comet Mixed

Another very early sort, of erect habit; branching white rose and blue mixed. Pkt., 15c.

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. Pkt., 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.)—A most charming new variety from Germany. Flower large and petals pure white, beautifully striped with a band of blue, red, pink, lilac or same other distinct color down the center of each. A very brilliant and showy flower. Pkt., 10c.

Simple'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. PRICE: 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. PRICE: 5c. FINE MIXED. Finest varieties and colors, mixed. PRICE: 5c.

Asters.

Balsam.

Cash discounts on Flower Seeds in Packets; 50c worth for 40c; \$1.00 worth for 75c; \$1.50 worth for \$1.00; \$2.00 worth for \$1.25.

Flowers

Candytuft.

FINE MIXED. 13-inch. PRICE: 5c.

ADONIS. Scarlet flower; best mixture. Pkt., 5c.

Calceolaria. Mixed colors. PRICE: Pkt., 10c.**Canterbury Bells.** Very ornamental garden plants of easiest culture; hardy biennial, 2½ feet high, producing large, bell-shaped flowers of exquisite colors. Fine mixed. PRICE: Pkt., 5c.**Carnation.** The finest of the Pink family, very fragrant. Our seed is unsurpassed. Finest mixed, the best greenhouse variety. PRICE: Pkt., 10c.**Cineraria.** As will be seen by the illustration from a single plant the Cineraria is a wonder for wealth of bloom and symmetry of form.

LARGE FLOWERING MIXED. PRICE: 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. PRICE: Pkt., 5c.**Daisy** (Bells Perennials). Will make young, strong plants to carry over winter, with protection, and blooms very early in the spring.

FINE DOUBLE MIXED. Six-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. PRICE: Per pkt., 10c.**Dahlia.** Everyone knows and admires the Double Dahlia, but few are aware that it can be grown so easily from seed, and flowers the first season.

DOUBLE MIXED. Finest varieties, two to four feet. PRICE: Pkt., 5c.

Fox-Glove (Digitalis). Showy for backgrounds and borders and are very beautiful when planted among shrubs. Thrives in any ordinary garden soil. Fine mixed colors.. PRICE: 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.**Chinese** (Double Chinese Pink.) A splendid mixture; one of the finest varieties; one foot. PRICE: Pkt., 5c.**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.**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. PRICE: Pkt., 5c.

FINE MIXED. Including many colors. PRICE: Pkt., 5c.

Calliopsis. Bright golden flowers, rich velvety and orange colors in choicest mixture. PRICE: 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. PRICE: 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. PRICE: Pkt., 5c.**Hybridus Mixed.** A choice mixture of all colors and sorts. PRICE: Pkt., 4c.**Forget-Me-Not.** Well known garden favorites. Flowers freely from seed the first summer. Blue, sky-blue, white, mixed. PRICE: Pkt., 5c.**Gourds** (Climbing). These curious and interesting plants should be more largely grown. All varieties mixed. PRICE: Pkt., 5c.**Four O'Clock** (Marvel of Peru). Everyone knows this favorite annual. PRICE: Pkt., 5c.**Chrysanthemum.** A handsome plant, with striking and brilliant flowers, blooming till late in the autumn, when it is in full glory; producing double and single flowers of various shades; very attractive for bouquets and vases. Sometimes called "Painted Daisies." Hardy annuals. Single Annual, mixed. PRICE: Pkt., 5c. Crimson and Double Annual, mixed colors. PRICE: Pkt., 5c.**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. PRICE: Pkt., 5c.**Bachelor's Buttons.** It is a beauty, the national flower of Germany, and 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. PRICE: 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. PRICE: Pkt., 5c.**Algeratum.** Valuable plants for large beds or borders, and very useful where cut flowers are in demand; in bloom the whole summer; also good for winter blooming in pots; succeeding in any soil. Indispensable for bouquets. Hardy annuals.

Canterbury Bells.

Carnation.

Heliotrope.

Flowers

Geranium.

Started early this favorite flower can be produced from the seed, and will flower the first season. Finest mixed. PRICE: Pkt., 5c.

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. PRICE: 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. PRICE: 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. PRICE: Pkt., 5c.

Sunflower.

Some varieties of this well known plant are very ornamental, and are effective in proper situations in shubbery borders or as screens. PRICE: 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. PRICE: Pkt., 5c; single, pkt., 5c.

Hibiscus.

Robust garden annuals; large saucer-shaped flowers of creamy yellow, with purple center; two feet. PRICE: Pkt., 5c.

Hiacinthus Candicans.

Giant summer-flowering hyacinth of robust growth, producing spikes three feet long, of white bell-shaped flowers, five feet. PRICE: Pkt., 5c.

Ice Plant.

Pretty summer annual traller for vases and rockwork; leaves covered with ice-like drops. Much used in Europe for garnishing; half foot. PRICE: Pkt., 5c.

Larkspur, New Double Hybrids.

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. PRICE: Pkt., 5c.

Latana.

Rapid growing, constant blooming, tender perennial plants for pot culture in the winter or garden decorations in the summer; clusters of flowers, orange, white, pink, etc.; two to three feet. Mixed colors. PRICE: 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.

AFRICAN MIXED. Best double colors; two feet. PRICE: Pkt., 5c.

DOUBLE FRENCH MIXED. Yellow, brown and crimson, beautifully striped; one foot. PRICE: Pkt., 5c.

Mignonette

(Reseda Odorata). 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.

SWEET SCENTED (Odorata). The old variety, very fragrant; one foot. PRICE: Pkt., 5c.

MIGNONETTE. MIXED. Many varieties. Pkt., 5c.

Morning Glories

(Fine Mixed). A mixture of the old varieties. Pkt., 4c.

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

((Heartase). 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., 5c.

WHITE OR SNOW QUEEN. Pkt., 5c.

FINE MIXED. Pkt., 5c.

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.

PORTULACA. In brilliancy and beauty of colors Portulaca 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.

Ricinus

(Castor Oil Bean). Ornamental plant of stately growth and picturesque foliage, with brilliant colored fruit, producing a sub-tropical effect; fine for lawns. 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.

PHLOX DRUMMONDI.

Double Portulaca.

RATEKIN
Shenandoah
Ia.

Ratekin's 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., 5c; 3 pkts., 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.

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 specially fine for bordering canna beds. Offered in seed for first time. Pkt., 10c.

STOCKS

Sometimes called Gilliflowers. 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 pyramids 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 seed; choicest strains. Pkt., 5c.

Large Flowering Dwarf German

Most popular flower with our German customers. Our mixture contains a great variety of colors. Pkt., 5c.

Choice New Spencer Sweet Peas

Noted for their distinct markings. Flowers are large, beautifully waved and fluted on the standards, with well waved wings.

The Marjorie Ratekin THE LARGEST AND BEST LAVENDER SPENCER SWEET 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. PRICE: Pkt., 10c; 2 pkts for 15c, postpaid.

APPLE BLOSSOM SPENCER. Rose and bush-pink, beautifully waved. Pkt., 10c; oz., 20c; ¼ lb., 60c.

BLACK KNIGHT SPENCER. Rich, deep maroon, very large. Pkt., 10c; oz., 25c; ¼ lb., 75c.

COUNTESS SPENCER. A lovely clear pink, shading deeper 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; oz., 20c; ¼ lb., 75c.

MRS. ROUTZAHN SPENCER. Soft chamois pink, a beautiful shade, and charming as a cut flower. Pkt., 10c; oz., 20c; ¼ lb., 75c.

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; oz., 15c; lb., 40c.

BLANCHE BURPEE. Pkt., 5c; oz., 15c; lb., 40c.

ECKFORD MIXTURE. By mail - postpaid: Per lb., 50c; ½ lb., 30c; ¼ lb., 15c; oz., 10c; pkt., large size, 5c.

COUNTESS OF RADNOR. Pkt., 5c; oz., 10c; ¼ lb., 25c.

CUPID. Pkt., 5c; oz., 10c; ¼ lb., 25c.

BARGAIN MIXTURES OF SWEET PEAS. Lb., 30c; ½ lb., 10c; pkt., 5c.

EMILY HENDERSON. Pkt., 5c; oz., 10c; ¼ lb., 20c.

EMILY ECKFORD. Pkt., 5c; oz., 10c; ¼ lb., 20c.

EXTRA EARLY BLANCHE FERRY. Pkt., 5c; oz., 10c; ¼ lb., 20c.

MAID OF HONOR. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 45c.

WILHELMINA. Pkt., 5c; oz., 10c; ¼ lb., 15c; lb., 45c.

LADY PENZANCE. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 40c.

NEW DWARF OR BONFIRE (Large Flowering Scarlet Sage). Pkt., 10c.

FANCY MIXED. Pkt., 5c; oz., 10c; ¼ lb., 20c; lb., 50c, postpaid.

White Spencer.

The Marjorie Ratekin.

CASH DISCOUNT ON FLOWER SEEDS IN PACKETS: 50c WORTH FOR 40c; \$1.00 WORTH FOR 75c; \$1.50 WORTH FOR \$1.00; \$2.00 WORTH FOR \$1.25.

Government Standard Pure Evergreen Lawn Grass Seed

We cannot refrain from this opportunity to present above to our friends a photographic view illustrating our magnificent United States Postoffice Government Building at Shenandoah. This is the only postoffice of the first-class in our (Eighth) Congressional District. It is located in the near business center of the city, on a triangular square spot of ground, surrounded on either side by broad paved streets. On the opposite sides within a stone's throw are located five of the thirteen church buildings of this city. These five churches are all new, costing approximately an average of forty thousand dollars each. The campus grounds surrounding the Government Building is beautifully set in a velvety lawn produced from RATEKIN'S EVERGREEN LAWN GRASS MIXTURE. This is the best mixture of grasses to be obtained anywhere. It is a careful blending of fine growing varieties, each in its proper proportion and thoroughly mixed so that the result from its planting is a uniform growth of rich green grass, and is often ready for cutting in four to six weeks from time of sowing. Price by mail, postpaid, 50c per lb.; 5 lbs., \$2.25; 10 lbs., \$4.25.

CLEAN YOUR SEED GRAIN

The Added Yield From Good Seed on Five Acres of Grain Will Pay for a Fanning Mill

The Clipper Grain and Seed Cleaner Clean your grain thoroughly with a Clipper before taking it to market. You will save and make the price of a machine in cleaning twenty-five bushels of seed, grain or grass seeds. We use several in our warehouse and heartily recommend the Clipper as the best farm mill made. Is adaptable for cleaning all classes of grain or seeds, such as wheat, corn, oats, barley, rye, beans, peas, buckwheat, millet, clover, alfalfa, timothy, flax, etc., and is suitable for farm or general use. Unlike other mills, the "Clipper" cleans all classes of seed and grain thoroughly in one operation, without any waste, and leaves no tailings to be rehandled. Effectual separation of plantain from clover seed is accomplished, removing all imperfect and foreign seed therefrom, as well as cleaning the perfect seed. This is an up-draft fanning-mill and does the best work in cleaning all kinds of seed and grain. Farmers would save the price of a mill in many cases by cleaning and grading up their grain before selling. A Clipper will pay for itself in one year by the increase in yield resulting from carefully cleaned seed grain.

No. 1. Farm size, with ten screens, complete, \$25.00. No. 2. Warehouse size, \$33.00. For larger sizes see special catalogue of Clipper Machines.

THE CYCLONE SEED SOWER

It is the greatest labor and seed saving invention of the age. The working principles are a novelty of simplicity, the result of more than twenty-five years of careful study. It is so simple in construction and perfect in operation that even a boy can operate it. It will sow Alfalfa, Timothy, Wheat, Oats, Rye, Buckwheat, Hungarian, Redtop, Turnip, Millet, Kafir, Cane, Cotton and all other grains and seeds perfectly even, any desired amount per acre, and from thirty to sixty acres a day. Full instructions and directions on every machine. Price \$1.50.

THE CYCLONE JR. SEED SOWER—Embodies all the principal features for even distribution of seeds, as found in our time-tested Cyclone Seeder. It is, however, built on slightly different principles. High in value, low in price. Each \$1.25.

Planet Jr. Tools for 1914

We have not the space to show the whole of the Planet, Jr., line, but will send a descriptive catalogue free on application. All Wheel Hoes for 1914 will be fitted with steel frames. This is a great improvement, as it adds largely to their durability and lasting qualities. By sending your orders to us you can rely upon getting bottom prices.

Planet, Jr., No. 4

COMBINED SEED DRILL,
SINGLE WHEEL HOE, CULTIVATOR AND PLOW.
PRICE, \$10.50.

AS A DRILL ONLY, \$8.50.

This is the most popular combined tool made. It combines in a single imple-

ment a first-class hill-dropping seeder, a single wheel hoe or weeder, a cultivator and a plow. The hopper holds two quarts of seed, which can be sown in continuous rows, or dropped in hills at 4, 6, 8, 12 or 24 inches apart.

The drill is detached and the tool frame substituted by removing but one bolt. It then becomes a single wheel hoe. It is useful almost every day of the season at every stage of the garden work. With this one implement the small farmer can do practically all the work in his small crops.

Planet, Jr., No. 1

COMBINED DRILL
SEEDER, WHEEL HOE,
CULTIVATOR AND PLOW.
PRICE, \$9.00.

This tool is known and used the world over, and excepting our hill and drill seeders is the most perfect drill known. The hopper holds three pints, and sows in an even, regular stream, whether there is much or little seed in it. The machine is extremely simple, has no agitators, belts or gearing, and will not injure any seed.

From a drill it is changed to its other uses by removing two bolts, when hoes, cultivator teeth or plows can be quickly attached. It is a practical everyday time and labor saver, a grand remedy for the backache, and the best low-priced combined machine on the market.

Planet, Jr., No. 12

DOUBLE WHEEL HOE,
CULTIVATOR AND PLOW.
PRICE, \$6.50.
FITTED WITH STEEL
FRAME.

Two acres a day can easily be worked with this implement, and when it is done it will be a better job than three men

could have done in the same time with hand hoes. The No. 12 runs either astride or between the rows; kills all the weeds and leaves the earth in fine shape. Then, too, it's so easy to work. Twelve-year-old girls work gardens with them with ease and success.

The No. 12 has a pair of 6-inch hoes, a pair of plows for opening or covering, and a set of four all steel cultivator teeth. The tools shown are what gardeners use most, and others can be added as wanted.

Planet, Jr., No. 25

COMBINED HILL AND DRILL
SEEDER, DOUBLE WHEEL
HOE CULTIVATOR
AND PLOW.
PRICE, \$13.00.

This new combined machine is intended for gardeners who have a large enough acreage in crops for a Double Wheel Hoe to be used to good advantage and prefer not to buy separate machines.

As a drill it is almost identical with the Planet, Jr., No. 4 Drill, and is thoroughly substantial and accurate in sowing all kinds of garden seeds in hills or drills.

As a Wheel Hoe it is practically the same as the Planet, Jr., No. 12 Double Wheel Hoe, the very best machine on the market. The change from Drill to Wheel Hoe takes but a moment, and the whole combination is one we can heartily recommend and guarantee satisfactory.

Planet, Jr., No. 14

DOUBLE WHEEL DISC HOE,
CULTIVATOR AND PLOW.
PRICE, \$7.50.
FITTED WITH STEEL
FRAMES.

This new tool will give excellent satisfaction; is especially pleasing to all who work peat lands. There are three oil tempered discs on each side.

The set of prong cultivator teeth are constructed on entirely new lines, and will be found invaluable in general cultivation.

The plows are the regular Planet, Jr., model and are continually valuable for furrowing, covering and plowing.

All Planet, Jr., Wheel Hoes are fitted with Steel Frames.

Planet, Jr., No. 17

SINGLE WHEEL HOE, CULTIVATOR AND PLOW.

PRICE, \$4.50.
FITTED WITH STEEL FRAME.

For easy gardening, and at the same time clean and perfect gardening, the kind that will make your garden the talk of the neighborhood and cause your face to glow with honest pride. Nothing is quite the equal of this No. 17 Single Wheel Hoe. It is suited to all kinds of garden cultivation and all garden crops. You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The No. 17 has a pair of 6-inch hoes, a plow and a set of cultivator teeth, an outfit sufficient for most garden work. Other attachments can be added at any time.

Nursery Department

RATEKIN'S HARDY, IRON-CLAD NORTHERN GROWN NURSERY STOCK

To Our Patrons It is with a sense of pride that we look back upon our last year's achievements and wish to extend our hearty thanks to our friends and customers for the hundreds of letters we have received praising our way of doing business, and the nursery stock we send out. We wish also to thank our friends for their hearty co-operation in helping us to get orders by sending us the names of the fruit growers in their section and the way they praised our Trees to their friends.

MORE THAN TWENTY-FIVE YEARS AGO, soon after we engaged in the seed business, we began to receive inquiries from our patrons with regard to reliable nursery stock. Through these inquiries we learned of many "fakes" practiced on purchasers by tree agents and peddlers, and were not slow to comprehend that a nursery business founded on the basis of AN HONEST, "SQUARE DEAL" could be handled to the mutual advantage of our customers and ourselves, thus supplying **FIRST-CLASS NURSERY STOCK AT LIVING PRICES.**

In view of these conditions the **RATEKIN NURSERIES** were started, our desire being to furnish our patrons and the trade with trees, shrubs and plants direct from Grower to Planter at a much less and cheaper price, and of a superior grade and quality in every respect than that sold over the country by tree agents and canvassers who go about the country with a plate book, showing nice pictures and a blank order book claiming to represent some reputable nursery firm, but who afterward, when they get a bunch or orders, go to some old nursery who are closing out their remnants at job lot prices, and from this stock purchase and fill your orders. Then did you ever stop to think what you pay for when you buy from a tree agent? Here's a plain statement of facts that may open your eyes. Every time you make such a buy you are paying an agent's expenses. Every time that man spends one-half day with you his salary or commission is added to the cost of the goods you buy.

Our catalogue is our salesman. It is always with you. It is clear and logical. It tells about our goods better than a salesman could and costs us one-fiftieth as much. But we do not save this difference for ourselves. We divide it with you. As with our seed line we believe in selecting the best varieties, prices are low, stock hardy and fresh; handling those only, and we will send you what we advertise, or refund your money, and pay freight both ways. We absolutely employ no agents. An agent's proposition to you is verbal, while ours is down in black and white. It would be well for you to consider these facts when placing your order for nursery stock.

Special Nursery Bargain Collections

ALL COLLECTIONS BY EXPRESS AT PURCHASER'S EXPENSE.

RATEKIN'S BIG BARGAIN OFFER

Collection No. 1

HERE IS YOUR CHANCE TO BUY YOUR TREES RIGHT

HERE THEY ARE!	20 Apple Trees	4 to 5 feet high	88 PLANTS ALL FOR \$10.00
	5 Pear Trees	4 to 5 feet high	
	6 Grape Vines	2 years old	
	5 Plum Trees	3 to 4 feet high	
	10 Peach Trees	3 to 4 feet high	
	6 Currant Bushes	2 years old	
	6 Raspberry Bushes	Extra Strong Tops	
	5 Pie Plants	Extra Good Plants	
	25 Asparagus	Makes nice crisp growth	

ORDER this collection now. Pin a \$10 Postoffice Order, Express Order or Check to this sheet and mail it to us today. These plants are absolutely good, strong, sturdy boys, A No. 1 in every respect, and don't forget that my price of \$10 for this wonderful collection of 88 plants is absolutely cost price to us. We want your business, of course, but first of all we want to show you that we have the goods, therefore we are making you this great, big bargain offer. ORDER IT NOW.

HERE ARE THE VARIETIES	Apple	5 Northwestern Greenings	A \$30.00 ORCHARD FOR \$10.00
		5 Ben Davis	
		5 Duchess of Oldenburg	
		5 Wealthy	
	Pears	3 Keiffer	
		2 Duchess	
	Grapes	3 Concord	
		3 Niagara	
	Plums	2 Abundance	
		3 Burbank	
	Peaches	5 Alberta	
		5 Bokara	
	Currants	3 Cherry	
		3 Fay's Prolific	
	Raspberries	3 Cumberland	
		3 Kansas Black	
	Pie Plant	5 Plants	
	Asparagus	25 Plants	

Collection No. 2

MEANS ONE DOLLAR TO YOU

	4-2-year-old Concord Grapes	VALUE \$4.02, ALL FOR \$3.00
	2-Strong plants Cumberland Raspberries	
	2-2-year-old Plants Fay's Currants	
	2-2-year-old Plants Downing Gooseberries	
	2-18 to 30-inch Bridalwreath (Spirea Van Houttei)	
	2-18 to 30-inch Hydrangea P. G.	
	2-18 to 30-inch Deutzia Dbl. Pink (Lemoneii)	
	3-4 to 5 ft. Duchess of Oldenburg Apple	

Collection No. 3 \$2.00 SAVED

Would Cost You at Least \$2 More Anywhere Else

4-2-year-old Concord Grapes	VALUE \$7.02, ALL FOR \$5.00
4-Strong Plant Eldorado Blackberry	
2-Strong Plants Cumberland Raspberries	
2-2-year-old Fay's Currants	
2-2-year-old Downing Gooseberries	
3-4 to 5-ft. Duchess of Oldenburg Apple	
2-18 to 30-inch Bridalwreath (Spirea Van Houttei)	
2-18 to 30-inch Hydrangea P. G.	
2-18 to 30-inch Deutzia Dbl. Pink (Lemoneii)	
2-4 to 5-ft. Clapp's Favorite Pear	
2-3 1/2 to 5-ft. Large Montmorency Cherries	VALUE \$10.47, ALL FOR \$7.50
2-3 to 4-ft. Shropshire Damson Plums	
2-3 to 4-ft. Elberta Peach	

Collection No. 4 \$3.00 SAVED

4-2-year-old Concord Grapes	VALUE \$10.47, ALL FOR \$7.50
1-Strong Plant Eldorado Blackberry	
2-Strong Plants Cumberland Raspberries	
2-2-year-old Fay's Currants	
2-2-year-old Downing Gooseberries	
3-4 to 5-ft. Duchess of Oldenburg Apple	
2-18 to 30-inch Bridalwreath (Spirea Van Houttei)	
2-18 to 30-inch Hydrangea P. G.	
2-18 to 30-inch Deutzia Dbl. Pink (Lemoneii)	
2-4 to 5-ft. Clapp's Favorite Pear	
2-3 1/2 to 5-ft. Large Montmorency Cherries	VALUE \$14.32, ALL FOR \$10.00
2-3 to 4-ft. Shropshire Damson Plums	
2-3 to 4-ft. Elberta Peach	
1-5 to 7-ft. American White Ash	
1-3 to 4 ft. Horse Chestnut	
1-6 to 8-ft. Norway Maple	
2-Honeysuckle Vines	
2-Clematis Paniculata Vines	

Collection No. 5 \$4.00 SAVED

4-2-year-old Concord Grapes	VALUE \$14.32, ALL FOR \$10.00
1-Strong Plant Eldorado Blackberry	
2-Strong Plants Cumberland Raspberries	
2-2-year-old Fay's Currants	
2-2-year-old Downing Gooseberries	
3-4 to 5-ft. Duchess of Oldenburg Apples	
2-18 to 30-inch Bridalwreath (Spirea van Houttei)	
2-18 to 30-inch Hydrangea P. G.	
2-18 to 30-inch Deutzia Dbl. Pink (Lemoneii)	
2-4 to 5-ft. Clapp's Favorite Pear	
2-3 1/2 to 5-ft. Large Montmorency Cherries	
2-3 to 4-ft. Shropshire Damson Plums	
2-3 to 4-ft. Elberta Peach	
1-5 to 7-ft. American White Ash	
1-3 to 4-ft. Horse Chestnut	
1-6 to 8-ft. Norway Maple	
2-Honeysuckle Vines	
2-Clematis Paniculata Vines	
2-2-year-old field grown Frau Karl Druishti Roses	
2-2-year-old field grown Crimson Rambler Climbing Roses	
100-18 to 24-inch Catalpa Seedlings	

Read My Free Delivery Offer

I pay the freight or express on all orders for Fruit and Ornamental Trees where orders amount to \$10.00 and over; and on all orders for small fruit, Shrubs, Climbing Vines, Roses, Strawberry Plants, etc., where orders amount to \$5.00 and over, to your nearest railroad station or express office anywhere in the United States, except on special collections.

This is My Free Will Offering, the Most Liberal Offer Ever Made. No more worrying about express charges, no more hold-ups by agents. We place ourselves at your door. You are dealing with the grower direct.

You know the exact cost of the goods and are insured of quick delivery.

My nursery business is growing. Last year showed an increase of 100 per cent over any previous year.

My customers are enthusiastic over the quality of stock I have been sending them. They have been writing me letters of praise on the merits of my Fruits and Ornamental Trees, Shrubs, Roses and Climbing Vines. In fact, everything I grow, telling me how thrifty and hardy the stock appeared, how well it stood severe drouth, and it made me feel good—so good that I am going to make the biggest, best, most liberal offer ever made.

I want to introduce our stock in every section of the country East to West, North to South. I want every one who has a garden or a home to plant a few of my Hardy, Ironclad Fruit Trees, Bushes or Shrubs and to meet you half way I am willing to place myself at your door and pay all freight or express as stated above.

Why You Gain By My Free Delivery Offer.

You know the exact cost of the goods you buy. It insures quick delivery. You get our high-grade stock cheaper than ordinary, inferior grades sold by tree peddlers and agents. It saves you money. It saves you worry. There are no holdups between the grower and the planter. No excessive charges. We assume the responsibility for safe delivery.

Our Guarantee. We guarantee safe arrival of all goods to any express or freight office in the United States in first-class condition. Should they be otherwise we will replace immediately.

WE REPLACE ANY TREES WHICH FAIL TO LIVE at one-half the current "Each" price, provided trees have been properly planted and cared for.

WE GUARANTEE TREES TRUE TO NAME, and use the utmost care to avoid mistakes, but should any prove untrue to label we will, upon proper proof, replace trees free; but are liable no further. Our liberal treatment of our customers during the past quarter of a century is our best guarantee for the future.

THE PRICES are for the quantities named, but six, fifty and five hundred will be supplied at twelve, hundred and thousand rates, respectively, i. e., six at half the price of twelve; fifty at half price of one hundred, and so on.

ALL OUR SHIPMENTS OF TREES will be accompanied by Certificate of Inspection of the State or Government Entomologists. Good stock, true to name, sold direct to the planter at reasonable prices is our aim.

BE FREE TO WRITE us for any information not found in this catalogue on a separate sheet of paper from your order, as your letter goes to the office and your order to the mail order department. Always be free to write. We like to hear from our friends and customers.

NURSERY STOCK BY MAIL. To accommodate our patrons who do not get their mail at railroad towns, and to save express on small orders of roses, shrubs, small fruits, etc., we have a Mail Department, but we shall only mail the following kinds of stock, in order running from 50 cents to \$2.00: Dewberries, raspberries, blackberries, currants, Juneberries, gooseberries, Strawberries, Rocky Mountain cherry, grapes, roses, shrubs, climbing plants, seedling evergreens, bulbs. In re-mitting don't fail to add to the price in the list at the rate of 20 cents for each \$1.00 of order to pay postage. If your order is 50 cents send us 60 cents; if \$1.00 send us \$1.20, etc. Small stock can be sent just as safely by mail as by express.

Location, Planting and Care.

DRIED UP TREES. In case trees arrive a little dry from delay on railroad, as will sometimes occur, bury the trees, root and branch, in moist soil and in two or three days the whole lot will be found bright and fresh, and in proper condition for setting.

LOCATION. The best is a northern exposure, and rich and better than low ground. A southern exposure is the poorest.

PREPARATION OF THE SOIL. Prepare a rich, deep bed of mellow soil and have the land sufficiently drained to relieve the roots from standing water. To insure a fine growth land should be in as good condition as is required for a crop of corn, wheat or potatoes.

SOIL. A clay sub-soil is best. If you do not have a clay sub-soil mulch heavily to keep the ground moist and cool.

PLANTING. Before planting cut roots and tops back vigorously. Either dip roots in thin mud before planting, or pour in plentifully of water when the hole is about one-half full. Holes for trees should be large and deep.

HOW TO SET. Sift some fine, rich soil among roots, two or three inches deep, tamp the ground firm, throw in more soil and tamp again. Repeat until hole is nearly full—make the ground very firm. The last soil thrown in leave loose.

MULCHING. If you cannot cultivate trees often use lots of mulch. Put on thick for three or four feet out from the trees, but not within three or four inches of the trees.

SEND LARGE BILLS FOR PRICING. In some cases and in some lines we are able to give a special discount. We will give you as much for your money as any reliable nursery in the United States.

Always Write Your Names and Address Plainly; give your full name, postoffice address, county and state, street number, box or rural route, as may be necessary. Give shipping point, if different from your postoffice address. State plainly how much money you enclose and in what form, whether postoffice, express order or bank draft.

Distance for Planting and Number to the Acre.

Distance	No. Acre	Distance	No. Acre
Blackberries or raspberries.....3x4 ft.....	3,630	Apple and crab16x16 ft.....	171
Strawberries, field1x3½ ft.....	9,680	Cherry, plum, pear12x15 ft.....	240
Strawberries, garden1x2 ft.....	21,880	Grapes8x 8 ft.....	680
Asparagus1x1 ft.....	43,660	Currants, gooseberries3x 4 ft.....	3,630

To find the number of plants required for any given sized piece of ground multiply the length of the piece by the width, divide this by the product of the distance multiplied by the width plants are apart. Example: A piece of ground is 20 by 100 feet, has 2,000 square feet. If currants are planted 3 by 4 feet, each plant will occupy 12 square feet; 2,000 divided by 12 gives 167.

Apples

THE FIRST FRUIT, both in importance and general culture, is the apple. Its period, unlike that of other fruits, extends nearly through the year. By planting judicious selections of summer, autumn and winter sorts A **CONSTANT SUCCESSION** can be easily obtained.

THERE SEEMS TO BE NO LIMIT TO THE PROFITABLE PRODUCTION OF THE APPLE. Take any particular year and you cannot name another crop so reliable and so profitable as a well-cared-for apple orchard. There is no reason to look for any change in this. Even with farm products low and in little demand there has been no year when there was not a good market for choice apples at paying prices.

THERE IS NO FARM CROP WHICH, ON THE AVERAGE, WILL PRODUCE ONE-FOURTH AS MUCH INCOME PER ACRE AS WILL A GOOD APPLE ORCHARD. As it takes from three to five years for an orchard to come into bearing some people hesitate to plant, regarding the time and expense.

Numerous examples of apple culture point the way to success. We may plant largely with every assurance of success if our plantations are properly cared for.

We offer the following varieties which are the best in cultivation at this time:

Summer Apples

Yellow Transparent.

(Russian Transparent, Grand Sultan). Of Russian origin; imported by the Department of Agriculture; ripening with Early Harvest, while the fruit will keep after ripening, making it peculiarly adapted for early shipping. Fruit pale yellow, roundish, oblate medium size and good quality; skin clear white at first, becoming a beautiful yellow when fully ripe.

Benoni. Medium, roundish, pale yellow, shaded with crimson; juicy, tender, sub-acid. August.

Duchess of Oldenburg.

Russian; medium to large size; skin yellow, streaked with red and somewhat blushed; flesh juicy and good, with a rich sub-acid flavor; tree a vigorous grower and abundant bearer; one of the ironclads. August.

Early Harvest.

Medium to large, roundish, bright straw color; flesh white, tender, juicy, crisp, with a rich sub-acid flavor; tree vigorous and productive; one of the best. First of July.

Red June.

Medium size; good quality; a good bearer; ripens after Early Harvest; bears well, but the apples do not keep long. It is therefore not best to plant too many.

Red Astrachan.

Free growth; large, roundish; deep crimson; juicy, rather acid; good; very hardy; highly esteemed on account of its fine appearance, earliness and hardness. Ripening August.

Fall Apples

Fameuse

(Snow). Tree hardy, vigorous and productive; a fine apple of medium size, round; surface pale yellow, nearly covered with red, made up of stripes and splashes; flesh snowy white, tender, fine grained, juicy; flavor mild, subacid; quality good to very good.

Harry Kaump.

We know of no apple that excels the Kaump for cooking purposes. Originated in Wisconsin, this is without doubt one of the hardiest apples propagated today. It comes into bearing early and is a continuous bearer. Fruit medium green, with show of color on sunny side; mildly acid and unsurpassed for dessert uses; late fall. After the Duchess we consider this the next best apple for Dakota, Iowa and southern Minnesota. You will never regret it if you buy a half dozen of these trees for family use.

Maiden's Blush.

This is the well-known and deservedly favorite fall apple. Tree vigorous, upright grower, spreading, very productive; fruit medium to large, flat and very handsome; surface smooth, polished, pale waxen yellow, with rich blush; flesh white, fine-grained, juicy; quality good; for cooking, table and market. August and September.

Rambo.

Tree strong, upright grower, abundant bearer; fruit medium to small on old trees; round, somewhat flattened at the ends; surface striped and splashed with scarlet on greenish yellow ground; flesh greenish white, tender, juicy; flavor subacid. September to December.

Alexander.

A very large and beautiful deep crimson apple, with pleasantly flavored yellowish white flesh. Very hardy.

August and September.

Fameuse or Snow.

Fall Pippin.

Very large, roundish, skin smooth, yellowish green, becoming rich yellow when ripe; valuable for cooking and market.

DIRECT FROM GROWER TO PLANTER.

We are selling trees to planters at nearly wholesale prices. How can we do this? We can do it for the reason that we do not have to pay salaries to tree agents and tree peddlers to canvas the country. We have no agents. Our catalogue is our only salesman. Those nurserymen who sell through agents spend half the money they get for the sale of trees in paying agents and agents' expenses.

Rome Beauty.

In addition to the foregoing varieties named we have a full assortment of the following at same prices per one, ten or per hundred. The following list are all well tested sorts, and we believe the best for general planting and marketing.

PRICES ON ALL THE FOREGOING AND FOLLOWING LIST OF APPLE TREES:

		Each	Per 10	Per 100
Extra 2 and 3 year.....	6 to 7 feet.....	\$0.28	\$2.50	\$24.60
Large size, 2 year	5 to 6 feet.....	.22	2.10	19.80
1 year, No. 1	4 to 6 feet.....	.20	1.80	15.80
1 year, No. 2	3 to 4 feet.....	.15	1.50	12.80

Summer Varieties.

A. S. Pearmain

Chenango Strawberry

Summer Pippin

Summer Queen

Fall Varieties.

Flora Belle

Hibernal

Utter's Red

Red Beitinheimer

Pewaukee

Winter Varieties.

Ark Beauty
Ark Black
Baldwin
Banana
Lansingberg
Coffelt

Day
Gideon's Best
Huntsman
Iowa Beauty
Ingram
Jenet

Roman Stem
Salome
Lawver
Longfield
Mo. Pippin

Yellow Belleflower
Peerless
Price's Sweet
Ramsdell Sweet
Carthouse

Cranberry Pippin
Stayman's Winesap
Scott's Winter
Walbridge
York Imperial

Crab Apples

Transcendent. Of the largest size of this class of apples; striped red, showy, excellent and very handsome.

Whitney. Large, glossy green, splashed with crimson; flesh firm, juicy; flavor very pleasant; ripens latter part of August; tree a good bearer and very hardy.

Yellow Siberian. Large and of beautiful golden yellow color; tree vigorous.

General Grant. Tree an erect and vigorous grower, fruit in dense clusters; quality excellent. October to December.

Florence. Large, very handsome and hardy; bears early and profusely.

Hyslop. Almost as large as early strawberry apple; deep crimson; very popular on account of its size, beauty and hardiness; tree vigorous.

Large Red Siberian. About an inch in diameter, grows in clusters; yellow, lively scarlet cheek; tree erect, vigorous, bears young and abundantly. September to October.

Price.	Each	Per dozen
5 to 7 ft., 3 yr. old, select grade.....	\$0.35	\$3.50
4 to 5 ft.	.30	3.00
3 to 4 ft.	.25	2.50

ESPECIAL ATTENTION IS CALLED TO THE FACT THAT THE RATEKIN NURSERY COMPANY PAYS THE FREIGHT or express on all orders for Fruit and Ornamental Trees where orders amount to \$10.00 and over and on all orders for small fruit and shrubs, climbing vines, roses, strawberry plants, etc., where orders amount to \$5.00 and over, to your nearest railroad station or express office anywhere in the United States, except on special collections.

Gooseberries

The bushes should be planted the same distance apart as currants. They should be annually and rather severely pruned by thinning all feeble and crowded branches. Mulch the same as currants.

Downing. Fruit large, roundish, light green, with distinct veins; skin smooth; flesh soft, juicy and good. Vigorous and productive.

Houghton. A medium sized American variety; bears abundant and regular, and never mildews; fruit smooth, tender and good; very valuable. No variety found that gives better satisfaction.

Industry. The best English gooseberry yet introduced; of vigorous, upright growth; a greater cropper than any known variety; berries of the largest size and of the most excellent flavor, both pleasant and rich; color when fully ripe dark red. Two yr., No. 1, 15c each; \$1.50 per 12; \$8.00 per 100. One yr., No. 1, 10c each; \$1.00 per 12; \$6.00 per 100.

Kieffer Pear.

Seckel. Small, rich, yellowish-brown; one of the best and highest flavored pears known; very productive. September and October.

Worden Seckel. A seedling of the Seckel, which for many years has been conceded to be the standard of excellence. Equal in quality to its famous parent, which it much resembles in flavor. Tree a more upright and rapid grower than Seckel; hardy and an enormous bearer; fruit keeps well, retaining its quality to the last. October.

Crosby.

Elberta. Large, yellow, with red cheek. Flesh yellow, firm, juicy. Exceedingly prolific, sure bearer and hardy. The leading market variety. Middle September.

Fitzgerald. Fruit large, brilliant color, suffused with red. Flesh deep yellow, best quality. Early September.

Niagara. Originated in western New York, where it has been well tested.

Hill's Chilli. Medium, dull yellow, extra hardy and productive. Last of September.

Pears

The best soil for pear culture should be of rich and heavy quality. The fruit of summer and autumn varieties should be picked as soon as it has attained full size, when, if ripened in dark, dry closets, it is not subject to rotting at the core, and develops its best flavor. Pick winter sorts as soon as the weather indicates the liability of hard frost.

Thinning out the fruit increases the size and quality of the remaining crop.

	Each.	Per doz.
5 to 7 ft., 3 yr., selected	\$0.30	\$3.00
4 to 5 ft., 2 yr., selected	.25	2.50
3 to 4 ft.	.20	2.00

Anjou. A large, handsome, greenish-yellow pear, blushed dull red and clouded with russet—one of the most delicious late fall pears—very juicy and of excellent quality. It succeeds everywhere. Should be largely planted commercially.

Bartlett. Large size, with often a beautiful blush next the tongue; buttery, very juicy and highly flavored; bears early and abundantly. Tree vigorous and very popular.

Clapp's Favorite. Very large; color yellowish green to full yellow when ripe; marbled with dull red in the sun; covered with small specks. Melting and rich; should be gathered early; tree vigorous.

Comice. Large, roundish, greenish-yellow, shading to bright yellow when fully ripe; flesh fine grain, white, melting and sweet. A good shipping pear. October and November.

Early Harvest. Large, golden-yellow, with bright red cheek, quality not the best, but grown extensively for market on account of its size, beauty and hardiness; ripens ahead of Bartlett.

Flemish Beauty. Large, juicy, melting and rich; strong grower and good bearer; very hardy. September and October.

Kieffer. This is the most popular pear grown; fruit of fine size, rich color and good quality; tree very vigorous and seldom blights; should be picked at maturity and ripened in doors. October and November.

Lawrence. Medium to large; lemon-yellow, with small brown dots; flesh white, juicy and melting and of good quality; one of the best winter pears known.

Peaches

The peach requires a well drained soil, a warm, sandy or gravelly loam is well suited to preserve a healthy growth. In trimming trees to plant use a sharp knife, cut all bruised roots off, making a clean cut. Trim side limbs off three inches from tree.

	Each.	Per dozen
5 to 7 ft., selected	\$0.20	\$2.00
4 to 5 ft., medium	.18	1.75
3 to 4 ft., 1 yr. old	.15	1.50

Alexander. Early, medium size, greenish white, nearly covered with red cheek, handsome, cling. July.

Admiral Dewey. Ripens with the Triumph, better form and color, stronger grower, hardy and productive. July.

Barnard. Medium, yellow, juicy and rich, hardy and productive. Early September.

Brunson. Large, yellow, with red cheek, sweet, rich, hardy and productive. Last of September.

Beers Smock. A large yellow flesh peach, an improvement on Smocks Free which it resembles, ripens a few days later and is a better annual bearer. One of the most desirable and profitable market sorts. Last of September.

Banner. Tree a good grower, exceedingly hardy in both wood and buds, bears young, is very productive. Fruit large. Deep yellow.

The Sterns Peach. No one can sing too loudly for its remarkable qualities cannot fail to make it herculean among the varieties of peach trees now under cultivation.

Crosby. One of the hardiest, abundant bearers, medium quality, bright yellow, fine quality. Middle September.

Early Rivers. Large, creamy white, with pink cheek, juicy and melting. August.

Greensboro. The largest and most beautifully colored of all early varieties. Double the size of Alexander, ripening at the same time. Flesh white, juicy and good. July.

Plums need care and attention, but they will pay for it very liberally. The Japan plums bear younger than the Europeans, and are great growers, with handsome foliage and fruit. Our plums are grown on plum stock.

PRICES ON ALL EXCEPT DAMSON.

First Class, $\frac{3}{4}$ and up, 2 yr., 35c each; \$3.50 per 12; \$25.00 per 100.

Select Medium, $\frac{5}{8}$ to $\frac{3}{4}$, 30c each; \$3.00 per 12; \$20.00 per 100.

Light Medium, $\frac{1}{2}$ to $\frac{5}{8}$, 20c each; \$2.00 per 12; \$15.00 per 100.

JAPANESE PLUMS.

Abundance. Medium size, round with slight point. Beautiful shade of red over yellow body. Flesh yellow, firm and juicy, with a slightly subacid flavor. Ripens in July.

Red June. Recommended as the best Japanese plum, ripening before Abundance. One of the vigorous upright growers. Productive, fair size, vermillion red, pleasant quality. Ripens a week before Abundance.

Satsuma Large, globular, with sharp point. Color purple and red. Flesh firm, juicy, red blood color. Fine quality, pit small. Hardy and vigorous grower. August.

Wickson. Fruit remarkably handsome. Very large. Long, heart shaped. Color deep maroon, flesh firm and meaty, yellow, rich and aromatic; pit small. Tree an upright, vigorous grower, excellent keeper and shipper. Early September.

Burbank. The best and most profitable of growers for market. Ripens ten to fourteen days after Abundance, tree hardy, sprawling, vigorous grower, unequaled in productiveness, bears young, fruit large, excellent quality. Cherry red, with a lilac bloom, ripens from middle of July to first of August.

Plums

EUROPEAN PLUMS.

Bradshaw. Large, dark red, flesh green, juicy, productive, fine for market. August.

German Prune. Large, dark purple, good. September.

Grand Duke. Color of Bradshaw, fruit very large, of fine quality, free from rot, very productive. Tree a moderate grower. Last of September.

Shipper's Pride. Quite large and showy, frequently two inches in diameter, oval, dark purple, of Damson type; flesh is sweet and firm, keeping and shipping long distances well. September.

Lombard. Medium, violet red, juicy, good. Hardy and productive. The leading market variety. August.

Monarch. Tree robust, an abundant bearer. Fruit large, roundish oval, dark purplish blue, perfect freestone. October.

Shropshire Damson. This largest of the Damson class is much used for preserving. The trees are vigorous and enormously productive. One of the old favorites. October. First Class, $\frac{3}{4}$ and up, 2 yr., 35c each; \$3.50 per 12; \$25.00 per 100. Select Medium, $\frac{5}{8}$ to $\frac{3}{4}$, 30c each; \$3.00 per 12; \$20.00 per 100.

Cherries

All budded on whole roots of imported French Mahaleb stock. They will not sprout. The cherry is so easily grown that it will produce good crops even with neglect on any situation except a low, damp soil. They usually commence bearing the third year after planting. No home orchard is complete without its proportion of cherry trees. It is one of the most profitable fruits. Better have too many than not enough, as the surplus finds ready sale at a good profit.

First Class, $\frac{3}{4}$ and up, 40c each; \$4.50 per 12; \$28.00 per 100. Select Medium, 35c each; \$4.00 per 12; \$22.00 per 100. Light Medium, 25c each; \$2.50 per 12; \$15.00 per 100.

Early Richmond. Everywhere the most popular. Tree strong, thrifty grower, making a large, symmetrical head; fruit medium size; red melting, juicy, of sprightly acid flavor. This is one of the most valuable and popular of the acid cherries; is unsurpassed for cooking purposes and exceedingly productive. Often fruits next year after planting. June.

Dyehouse. A very early and sure bearer. Ripens a week before Early Richmond. June.

Allen. Of excellent quality and large size. Nearly heart shaped. Shining and smooth. Color when ripe nearly black. Very meaty and firm, free from rot and disease. A strong, vigorous growing, productive variety. Ripens late in July.

Black Eagle. Large, tender, juicy, rich. July.

Black Tartarian. Very large, black, juicy, rich, excellent, productive. Last of June.

Gov. Wood. Large, light red, juicy, rich, delicious. Tree healthy and productive. June.

Napoleon. Large, pale yellow or red. Firm, juicy, sweet and productive. July.

Cook's Imperial. Very large, Color red, tree vigorous and productive. First of July.

Winsor. Fruit large, liver colored, flesh remarkably firm and of fine quality. Tree hardy and prolific. A valuable late variety. July.

Wragg. Very hardy, vigorous and productive, medium, dark purple, fine quality. August.

Baldwin. Large, round, slightly subacid, sweetest and richest of the Morello type. A fine, upright grower, remarkable for its earliness, hardiness and productiveness. June.

Large Mt. Morency. Large, red, productive. Ten days later than Early Richmond. Last of June.

May Duke. Large, red, juicy, rich. June.

Apricots

A beautiful delicious fruit; a close relation to the plum and peach, combining the qualities of both. The fruit ripens after early cherries and just before plums and peaches. The tree is hardy as the peach and requires the same cultivation. Apricots for drying and canning have no superior.

	Each	Per dozen
5 to 7 ft.....	\$0.30	\$1.60
4 to 5 ft.....	.25	2.50

Alexander (Russian). Medium to small light orange yellow, flecked with red; flesh tender, juicy, sweet and good quality; hardy; very productive. July.

Budd (Russian). Medium to large, light orange, with blush on sunny side; flesh sweet, juicy, with flavor of the peach; hardy and productive. August.

Early Golden Small, roundish-oval; pale with smooth skin; flesh yellow, juicy, sweet and of the best quality, hardy and productive; freestone.

Harris Large, oval, bright yellow, with red cheek; flesh tender, juicy, sweet and good; tree hardy, productive. Late July.

Mulberries

The mulberry is valued as an ornamental tree, and the fruit is quite popular. Should be planted in deep, rich sandy loam. Requires little care and is of easy culture. The fruit is sprightly and refreshing, and is a valuable addition to any fruit garden.

	Each	Per dozen
Downing's Everbearing, 4 to 5 ft.....	\$0.40	\$3.75
Improved Russian, 4 to 5 ft.....	.25	2.50
New American	.40	4.00
Downing	.40	4.00

Grape Vines

One of the best, healthiest fruits we have. Grows in any kind of soil that is not wet; any side hill will do for a grape vineyard. Those who have only a lot or two or a small garden can plant them alongside a building or a fence. They will take up little room and will bear an abundance of fruit every year. They will stand a severe climate, and some varieties can be successfully raised as far north as North and South Dakota. Plant in rows eight feet apart and six feet in the row. We give below the best, hardiest varieties for the West. Except where otherwise noted all grape vines are 2-year-old No. 1 extra heavy, well rooted plants.

PRICES ON GRAPES.

	One Year, No. 1			Two Years, No. 1		
	Each	Per 10	Per 100	Each	Per 10	Per 100
Agawan	\$0.10	\$0.75	\$6.00	\$0.12	\$0.90	\$7.50
Brighton	.10	.75	6.00	.12	.90	7.50
Catawba	.10	.75	6.00	.12	.90	7.50
Champion	.10	.75	6.00	.12	.90	7.50
Concord	.08	.60	5.00	.10	.70	6.00
Campbell's Early	.20	2.00	18.00	.35	3.00	20.00
Delaware	.12	.90	8.00	.15	1.00	9.00
Diamond	.15	1.50	12.00	.20	1.75	15.00
Elvira	.08	.60	5.00	.10	.75	6.00
Eaton	.12	.90	8.00	.15	1.00	9.00
Green Mountain	.20	1.75	15.00	.25	2.00	17.50
McPike	.25	2.50	20.00	.30	2.75	22.00
Martha	.10	.75	6.00	.12	.90	7.00
Moon's Early	.12	.90	7.50	.15	1.00	8.50
Niagara	.10	.75	6.00	.12	.90	7.50
Vergennes	.15	1.50	12.00	.20	2.00	18.00
Worden	.08	.60	5.00	.10	.70	6.00
Wyoming	.15	1.25	10.00	.18	1.50	12.00
Woodruff	.15	1.50	12.00	.20	1.80	15.00

Blackberries

Should be planted in rows six to seven feet apart, three to five feet in rows. Keep the ground light and rich. Pinch the canes back when they have reached four feet in height.

Rathbun Vigorous, branching, making plenty of fruitwood. Has stood 30 degrees below zero and bore a full crop the next summer. Roots sucker very little and must be propagated by layering the tips of the shoots. Berries are large, intensely black, with a high polish. Are firm, carry well to the market and retain their handsome appearance. Good for table use, canning or cooking. Is in all points fully as good or better than the old Wilson and much harder.

Snyder Extremely hardy, enormously productive, medium size; no hard core; only a few thorns and they are short; most prolific blackberry grown.

Stone's Hardy Vigorous grower; berry glossy black and good flavor; a little later than Snyder.

Early Harvest This is the earliest blackberry in cultivation; a compact, dwarf grower.

Eldorado The vines are vigorous and hardy, enduring the winters of the Northwest without injury, and their yield is enormous. Berries large, jet black, borne in large clusters, and ripen well together. They are very sweet and pleasing to the taste, have no hard core, and a good keeper after picking, with quality unimpaired. Each, 10c; 50c per 12; \$2.00 per 100.

Wilson A magnificent, large, early berry of sweet, excellent flavor. Ripens evenly, holds its color well, and brings the highest market price. Strong grower, exceedingly productive. Each, 10c; 40c per 12; \$4.00 per 100. Each and dozen by mail, postpaid. Hundred and thousand by freight or express, not prepaid.

Should be planted in rows six to seven feet apart, three to five feet in the rows. Keep the ground light and rich. Pinch the canes back when they reach the height of two to three feet. All above lowest prices.

Raspberries

Raspberries do well on any soil that will produce a good corn crop. Land should be thoroughly prepared. Keep well cultivated and free from weeds. As soon as they have done bearing cut out the old wood, to give more vigor to the young canes. Plant in rows six to eight feet apart, and $3\frac{1}{2}$ to four feet in rows for field culture.

Kansas.

Cumberland The largest of all Black-caps. A healthy, vigorous grower, throwing up stout, stocky, well-branched canes that produce immense crops of berries. Fruit large, firm, quality the same as Gregg, keeps as well as any of the blacks. The most profitable market variety. On our farm this season they had as good a crop of fruit as ever. They were not hurt by the October freeze or winter, while the other varieties were badly damaged. Each, 10c; 50c per 12; \$3.00 per 100; \$20.00 per 1,000.

Gregg For many years the leading standard, best known market sort; productive, large size, firm, meaty, covered with heavy fruit. Each, 10c; 50c per 12; \$3.00 per 100; \$16.00 per 1,000.

Kansas Strong, vigorous grower, standing extreme drouth and cold and bearing immense crops. Early ripening, after Palmer. Berries the size of Gregg, of better color, jet black and free from bloom, firm, of best quality, present a handsome appearance, and bring highest price in market. Each, 10c; 50c per 12; \$3.00 per 100; \$16.00 per 1,000.

Eureka (Cap) A fine blackcap in every particular. It is first early, very large and productive. Very profitable for market. Each, 10c; 50c per 12; \$3.00 per 100; \$20.00 per 1,000.

You will be surprised at the cash results from a comparatively small patch of raspberries when they are given reasonable care. An acre will usually turn more cash into the farmer's pocket than any other acre on the farm.

King Pronounced the best early red raspberry by the leading horticulturists. Plant a strong grower, very hardy and productive. Berry firm. In size as large as Cuthbert. Beautiful bright scarlet color. Season a few days later than Thompson. We have fruited them and find them the best red raspberries on our farms. Each, 10c; 50c per 12; \$3.00 per 100; \$16.00 per 1,000.

Loudon It succeeds well, one of the best red midseason varieties. Hardy, good size and quality, productive. Each, 10c; 50c per 12; \$3.00 per 100; \$20.00 per 1,000.

Miller Early, very hardy; does not winter kill. The best early variety. Shipping qualities perfect. Makes a healthy growth of cane. Very productive and good size. Each, 10c; 50c per 12; \$3.00 per 100; \$16.00 per 1,000.

Thompson's Early Prolific This is the earliest red raspberry in fruiting. They are of good size, bright red, productive, good quality and the best shippers. Profitable on account of their earliness. Each, 10c; 50c per 12; \$3.00 per 100; \$16.00 per 1,000.

Cuthbert, or Queen of the Market Remarkably strong, hardy. Stands the Northern winters and Southern summers equal to any. Berries very large, conical, rich crimson, very handsome and firm; they can be shipped hundreds of miles by rail in good condition. Flavor rich, sweet and luscious. The leading market variety for main crop. Each, 10c; 50c per 12; \$3.00 per 100; \$16.00 per 1,000.

Strawberries

Strawberries will succeed in any soil that is adapted to ordinary farm garden crops; soil should be thoroughly prepared to a good depth, well drained and enriched. In field culture set the rows from three to three and a half feet apart, fifteen to eighteen inches in rows. For garden fifteen inches apart each way. Ground should be kept clean and well cultivated. In winter a covering of leaves, straw or some kind of litter will protect the plants. Do not cover until ground is frozen, or so deep as to smother the plants; remove covering before growth starts in spring. The blossoms of those marked with a (p) are destitute of stamens, and are termed pistillate, and unless a row of perfect flowering variety is planted at intervals not exceeding a rod they will produce imperfect fruit, and but little of it, but when properly fertilized they are more prolific than those with perfect flowers. Our stock is pure, each kind kept by itself, cultivated entirely for the production of plants; they are carefully graded and packed, and certainly give the best of satisfaction.

Baldwin's Pride of Michigan We place this variety first on our list because this is where it should be. It's the best thing we have. Baldwin's Pride of Michigan is, without doubt, the best and most profitable variety of strawberry ever introduced in the United States. Will outyield any other strawberry. Last year many of you were disappointed in not being able to get our Pride of Michigan. We were sold out early and could have sold nearly two hundred thousand more if we had had the plants. 40c per 12; \$1.50 per 100; \$10.00 per 1,000.

Clyde A strong growing, perfect blooming healthy plant, with light green foliage. Everywhere tested it proved to be exceedingly productive of large, globular berries, perfectly formed, always inclined to overbear. Some plants have more fruit stalks than leaf stalks. A light application of nitrate of soda, in early spring before fruiting will stimulate greater foliage growth, and so help the fruiting of this remarkable variety.

Crescent (P). A standard of productiveness all over the country; succeeds every where. Stands neglect best of any; plant small, berries fair size, bright and attractive. Not very firm. Many growers consider this the most profitable berry for market.

Senator Dunlap A well tested, wonderfully productive variety, one of the safe sorts to plant everywhere and sure to take a high place among the prominent standard sorts. Plant resembles Warfield, rampant runner, should be restricted in its production of plants; fully equal to Crescent and Warfield in its ability to succeed under all circumstances. Fruit good size, regular form, beautiful bright red, glossy, firm, splendid keeper and shipper, excellent quality, one of the best for canning. Ripens early, and continues a long time. It promises to stand at the head in its wonderful ability to ripen a good crop under almost any condition of drouth or neglect.

Glen Mary Berries large to very large, often flattened, bright deep red on surface; light red to center. Sweet, rich, good flavor. Season medium to late. One of the most productive and holds its size well to the end of the season. Plants very vigorous, and one of the best for home use and near-by market. 30c per 12; 75c per 100.

Warfield (P). Its great beauty, firmness and earliness, good flavor, productiveness and vigor makes it especially popular. Ripens with Senator Dunlap, which makes a good fertilizer to plant with it, as the shape and color of the berries are the same, and look a great deal alike when picked together.

	Per 12	Per 100	Per 1000		Per 12	Per 100	Per 1000
Myer's Seedling	\$.40	\$1.50	\$10.00	Haverland (P)	\$.25	\$.60	\$5.00
Pride of Michigan	.40	1.00	8.00	Michel's Early	.25	.60	4.80
Lovetts	.25	.60	4.50	Pocomoke	.25	.60	4.80
Aroma	.25	.60	5.00	Senator Dunlap	.25	.60	5.00
Beder Wood	.25	.60	5.00	Sample (P)	.25	.60	4.75
Bubach (P)	.25	.60	5.00	Tennessee Prolific	.25	.50	4.60
Barton's Eclipse (P)	.25	.60	5.00	Uncle Jim	.25	.60	5.00
Clyde	.25	.60	5.00	Warfield (P)	.25	.50	4.50
Crescent (P)	.25	.50	4.50	Wm. Belt	.25	.60	5.00
Glen Mary	.25	.60	5.00				

Six of variety at dozen, twenty-five at hundred, and two hundred fifty at thousand rates. At dozen rates we pay postage, at 100 rates, to go by mail, add 25 cents to each 100. At 100 and 1,000 rates to go by express or freight, charges to be paid by the purchaser. If you want a large number of strawberry plants write us for special prices.

Currants

Hardy, easily cultivated, standing neglect well, and liberally responding to cultivation and generous treatment; indispensable for jellies, table use, etc. No garden is complete without them, and large quantities are required for market. Set four feet apart in rich ground, cultivate well, or mulch heavily; prune out old wood so that each remaining shoot will have room to grow. If the currant worm appears dust with hebleore.

Cherry. Berries sometimes one-half inch in diameter, bunches short. Vigorous and productive when grown on good soil and well cultivated.

Fay's Prolific. The leading market variety. Extra large stems and berries. Uniform size, easily picked, exceedingly productive; no variety ever made as quick a jump in popular favor, the demand being, in most seasons, in excess of the supply.

Victoria. Large, light red, bunches extremely long. Berries medium size of excellent quality. Ripens late.

Red Dutch. An old well known sort. Good quality, berry medium, long bunch, very productive.

White Grape. Very large, yellowish white; sweet or very mild acid. Excellent quality and valuable for table.

Very productive.

Lee's Prolific. This is a black currant; extra quality, strong grower. Productive.

Wilder. One of the strongest growers and most productive. Bunch and berries very large; bright, attractive red color, even when dead ripe. Hangs on the bushes in fine condition for handling, as late as any known variety. Compared with the celebrated Fay's, it is equal in size, with longer bunches; better in quality, with much less acidity. Ripens at same time, continues on bush much longer, fully as prolific, in some trials, largely outyielding it.

London Market. For many years this variety has been fruiting in Michigan, where it is now planted extensively and regarded as the best market variety of that great fruit state. Plant is extremely us, with perfect foliage which it retains through the season, an enormous cropper. Ripens with Victoria, is larger in both bunch and berry, a better bearer. For any use—home garden or market—one of the best.

North Star. The strongest grower among the red varieties; should be given plenty of room and ground kept well enriched; bunches average four inches in length and are freely produced. Combines extreme hardiness, vigorous growth, extra quality and great productiveness.

Perfection. Berries are a beautiful bright red and larger than Fay's Prolific. In quality it is said to be superior to anything in the market today; rich, mild, subacid flavor, with plenty of pulp and few seeds, clusters are long and size of berry is maintained to the end.

PRICE OF CURRANTS.

2 yr., No. 1, 10c each; \$1.00 per 12; \$5.00 per 100.
1 yr., No. 1, 8c each; 75c per 12; \$4.00 per 100.

Pocatello, Idaho.

I am pleased to report that all the nursery stock, including fruit trees and shrubbery I ordered from you last spring has done well. Did not lose a tree or shrub. Please send me your fall catalogue and oblige,

HENRY FIELDER.

Perfection Currant.

Dewberries

Lucretia. One of the low growing, trailing blackberries. In size and quality it equals any of the tall growing sorts. Perfectly hardy, healthy and remarkably productive. The fruit, which ripens early, is often one and one-half inches long, by one inch in diameter. Soft, sweet and luscious throughout, with no hard core. Ripens before late raspberries are gone. Should be mulched to keep berries from ground. We can highly recommend this variety. Plants are grown from tips the same as black raspberries, plants set in rows six feet apart, three to four feet in rows. In spring cut back wood from twelve to sixteen inches. Each, 8c; 40c per 12; \$2.50 per 100; \$15.00 per 1,000.

Austin's Improved (Mayes). An early dewberry of excellent quality and large yield. Berries large, short and thick; canes vigorous, hardy and productive. Ripens fully a week earlier than Lucretia, and for this reason is valuable to grow in connection with that variety. Each, 10c; 50c per 12; \$1.25 per 100; \$10.00 per 1,000.

Premo. This remarkable new dewberry is a sport from the grand old Lucretia. The great profitableness of the Lucretia with many growers has been because it was the earliest of the blackberry family to ripen. Now we have Premo, still earlier and larger; that means extra money in the market and an earlier taste of the delicious dewberries for the family. Premo has imperfect flowers, and so in planting every third or fourth row should be of Lucretia; or better yet, where one is equally fond of both varieties, they can be planted in alternate rows. Remember that Premo is a delicious, great blackberry that begins to ripen when the raspberry season is half over. Each, 8c; 40c per 12; \$2.50 per 100; \$15.00 per 1,000.

Asparagus

No garden is too small to have a bed of this earliest and finest of spring vegetables. Prepare ground by trenching to depth of two feet, mixing each layer of soil as turned over with two or three inches of well rotted manure. This is one of the most profitable crops to grow, and one that is easily handled. A field well planted will last a lifetime. Plant rows from three to four feet apart, twelve to fifteen inches apart in a row. Do not cut for use until the plants have grown two seasons.

Palmetto. This is a new sort, which is becoming quite popular. It produces shoots of the very largest size. It is very early, which makes it very valuable for market or home use. 2 years, 30c per 12; \$1.00 per 100; \$6.00 per 1,000. 1 year, 25c per 12; 75c per 100; \$5.00 per 1,000. Send for special prices in large lots of several thousand.

Conover's Colossal A standard variety of large size, tender and of excellent quality. 2 years, 30c per 12; \$1.00 per 100; \$5.00 per 1,000. 1 year, 25c per 12; 75c per 100; \$4.00 per 1,000. Send for special prices in large lots of several thousand.

Rhubarb or Pie Plant

A deep, rich soil is indispensable to secure large, heavy stalks. Plant in rows four feet apart, with the plant three feet distant. Set so that the crowns are an inch below the surface. Top-dress annually in the fall with stable manure and fork under in the spring.

Queen. Strong, vigorous grower, producing extra large stalks of finest quality, of a decided pink color. For canning or cooking in any way its quality is unsurpassed. Each, 10c; dozen, 75c; one hundred, \$4.00.

Myatt's Linnaeus. Popular, and the best for general use. Early, very large, productive, tender and delicately flavored. Requires less sugar than other sorts. Each, 10c; dozen, 75c; one hundred, \$4.00.

Horseradish

Fine, large, thick roots may be grown in a single season. A valuable garden plant, easy to grow, and used on meats is a splendid appetizer. The tops are used in early spring for greens. Per dozen, 20c; per 100, \$3.00.

Catalpa Bungei.

HILE most people appreciate well-arranged and well-kept grounds, large or small, many fail to realize that they can have equally fine grounds. They have tried a few shrubs or roses, perhaps, growing in thick turf, with no attention given to pruning or cultivating. Under such circumstances good results cannot be expected.

Aside from the pleasure of having fine trees, shrubs, vines and flowers in the grounds surrounding a home few realize how much these add to the commercial value of a place. A purchaser having to decide between a house with bare, unkempt grounds, and one surrounded by fine ornaments, invariably chooses the latter at a marked advance in price, because he sees that he will at once enjoy what it would otherwise take years to secure. Sagacious men are led by a knowledge of these facts to plant fine trees and shrubs about vacant lots they intend to put on the market. Lots thus planted readily secure purchasers at good prices, when bare grounds go begging.

HOW TO PLANT.

Do not make the mistake of planting at random. A fine, well-cut lawn is one of the handsomest features of a place. Trees may be planted along a lane or avenue leading to the house, or dotted about the lawn on lines radiating from it. This will secure light and air, with good views. When practicable upright shrubs and roses should be planted in beds, each class by itself, about the borders of the grounds. These beds should be well cultivated, and the plants annually pruned. When the growth of the plants has made them very thick some should be taken out. It will not do to plant so little that years must elapse before a fine effect will be produced. A surplus should be planted at first, and this gradually taken out. Vines should be planted near to and allowed to climb upon and about the house, or they may be trained on posts, arbors or stakes, placed in suitable locations on the lawn.

This department of our business is extensive. Avenue and park trees are cultivated in large blocks, shrubs and small growing trees cover many acres and thousands of rows contain the more delicate shrubs and herbaceous plants. To people desirous of laying out or beautifying their grounds we estimate on large or small places. In ordering we suggest purchasing with turns, cutting off unsightly views or leaving long, clear vistas through the lawn.

All our trees are grown under a thorough, clean system of cultivation, frequently transplanted, and are well supplied with an abundance of fibrous roots, which enables them to bear transplanting well. Do not be deceived into planting forest-grown trees, for disappointment follows ninety-nine plantings in every 100. In many varieties we have large specimen trees, which are not quoted herein. Prices on these will be cheerfully given on application. For hardiness and quick growth we especially recommend the Catalpa Speciosa, Silver or Soft Maple and Carolina, Lombardy and Silver Poplars.

Special Note—We can supply all sizes in ornamental trees, thus those desiring trees for parks, cemeteries, etc., or in large quantities should write for special quotations. Prices quoted are for trees on board cars at nursery, and freight or express, to be paid by purchaser. Six can be had at dozen prices, 50 at 100 rates, 500 at 1,000 rates.

Ash, American White A valuable native variety of rapid growth, forming straight, clean trunks and broad, oval shaped heads. Desirable for parks, public grounds and street planting; also for timber and forestry purposes. Four to six feet, each, 75c; doz., \$7.00.

Box Elder Two to two and a half inch caliper, 10c each; \$1.00 per 12.

Birch, European White A distinct, native species of vigorous, rapid growth. Bark white, triangular, tapering and pointing. It is very hardy and will grow in sandy or rocky soil in any situation, of easy culture and makes a beautiful shade and ornamental tree. **PRICE:** Three to four feet, each 25c; doz., \$2.50; 100, \$15.00.

Catalpa (Speciosa). This hardy native variety is one of the finest for shade and ornament in our entire list. The leaves are large, heart-shaped, beautifully ribbed, never subject to the attacks of insects, and at all times clean, vigorous and beautiful. **PRICE:** Three to four feet, each 25c; doz., \$2.50; 4 to 6 feet, each 35c; doz., \$3.50.

Chinese Catalpa (C. Bungei.) A remarkable species, forming a dense, round, umbrella-like head; makes a beautiful lawn tree when grafted or budded on a high stem. Price, same as Speciosa.

Elm, American This is well known and thrives in any soil. **PRICE:** Four to 6 ft., each 20c; doz., \$2.25; 100, \$15.00; 6 to 8 ft., each 25c; doz., \$3.00; 100, \$30.00; 8 to 10 ft., each 40c; doz., \$4.00; 100, \$35.00.

Cottonwood, Canadian Poplar. A tall, native tree, with large shining leaves, growing eighty to 100 feet high. **PRICE:** Four to 6 ft., each, 25c; doz., \$2.50; 6 to 8 ft., each, 35c; doz., \$3.50; 100, \$15.00; 8 to 10 ft., each, 50c; doz., \$5.00; 100, 25.00; 10 to 12 ft., each, 60c; doz., \$6.00; 100, \$35.00.

Flowering Crab, Bechtel's. Makes a medium sized tree, perfectly hardy, succeeds well in all soils not extremely wet. When in bloom appears to be covered with delicate pink, perfect double small roses, of delicious fragrance, the only sweet-scented double crab. **PRICE:** Each, 3 to 4 ft., 75c; 4 to 5 ft., \$1.00.

Linden, European. Similar to the American Linden. **PRICE:** Four to 6 ft., each, 35c; doz., \$3.50; 6 to 8 ft., each, 60c; doz., \$6.50; 8 to 10 ft., each, 75c; doz., \$8.00.

Linden, American (Basswood). Perfectly hardy everywhere, most vigorous in growth, with large, clean, handsome foliage, affording an abundance of shade and forming large, stately trees in a short time.

Nut Trees

American Sweet Chestnut. This is a valuable native tree, both useful and ornamental. Timber is very durable, and possesses a fine grain for oil finish. Nut sweet, of delicious flavor, and are a valuable article of commerce. Each, 6 to 8 feet, trees, 50c; dozen, \$5.00; 3 to 4 feet, trees, 30c; dozen, \$2.50.

Filberts. Of easy culture. Growing 6 to 8 feet. Entirely hardy, and one of the most profitable and satisfactory nuts to grow. Succeeds on almost all soils, bearing early and abundantly. Nuts nearly round. Rich and excellent flavor. Admirable for dessert. Each, 6 to 8 feet, 40c; dozen, \$4.00.

Butternuts. A fine native tree, producing a large, longish nut, which is prized for its sweet, oily, nutritious kernel. Each, 6 to 8 feet, trees, 50c; dozen, \$5.00; 3 to 4 feet, 30c; dozen, \$3.00.

Walnuts, Black. A native tree of large size and majestic form. Beautiful foliage, and most valuable of all trees for its timber, which enters largely into manufacture of fine furniture and cabinet ware, and brings the highest price in market. Tree a rapid grower, producing a large round nut of excellent quality. Each, 6 to 8 feet, trees, 50c; dozen, \$5.00; 3 to 4 feet, 30c; dozen, \$3.00.

Walnut, Japan Sieboldi. Perfectly hardy, rapid grower, handsome form, immense leaves; bears young and abundantly; one of the finest ornamental trees. Nuts produced in clusters; resembles butternut in shape and quality; smaller, with smooth and thinner shell. Worthy of extensive planting. Each, 4 to 6 feet, 50c; dozen, \$5.00.

Weeping Deciduous Trees

The different varieties of "weeping" or pendulous trees make attractive and graceful ornaments to the landscape, and add much beauty to a planting of shrubbery, breaking up the stiff lines of deciduous or evergreen trees, and making a most pleasing variation. They are often used as single specimens on the lawn with marked effect. In our list will be found all of the kinds which we deem particularly attractive. Customers will, however, be saved from disappointment if they will realize that it is impossible to deliver them from the nursery with the form and shape which they will attain with age. It can no more be done than fruit trees could be delivered with the fruit on.

Mulberry (Teas' Weeping Russian). One of the most graceful and beautiful of the hardy, weeping tree, and wholly unique, having a perfect umbrella shaped head and slender willow branches. The foliage is glossy green and with delicacy of form and motion it combines Russian health and vigor. **PRICE:** Five to 6-foot, 1 year head, each, \$1.00; dozen, \$10.00. Five to 6-foot, 2 year, head, each \$1.25; dozen, \$12.00.

Camperdown Weeping Elm. Its vigorous branches, which have a uniform habit, overlap so regularly that a compact root-like head is formed. Leaves are large, glossy dark green. A strong, vigorous grower. One of the best weeping trees. It can be trained to form an arbor if desired. The peculiar characteristics of this tree make it very popular and valuable for the lawn. Hardy everywhere and not particular as to soil. With age the weeping branches will eventually sweep the ground, and enclose a shady place as effectively as an arbor. This tree thrives splendidly in our state. Grafted 6 feet high. **PRICE:** \$1.00 each.

Mountain Ash, Weeping. A beautiful tree of hardy, vigorous growth with straggling, pendent branches, turning and twisting in all directions, in a few years forming an immense head, with branches resting on the ground, and producing a very pleasant effect. Six to 7-foot, 1 year head, each, 75c; dozen, \$7.50.

Beech. Purple leaved; makes an elegant medium size tree for the lawn. The foliage in the spring is a deep purple, later changing to crimson, and in autumn a dull purplish green. Each, three to four feet, \$1.50.

Birch, Cut-Leaf, Weeping. One of the most elegant of all weeping or pendulous trees. Its tall, slender yet vigorous growth, graceful, drooping habit, silvery white bark and delicately cut foliage presents a combination of attractive characteristics rarely met with in a single tree. Each, 3 to 4 feet, \$1.00.

Willow (Golden). A showy variety, with golden bark, of high color, making it very conspicuous during the winter; a handsome tree at all seasons. Each, 6 to 8 feet, 50c.

Willow (Weeping). A showy variety, most graceful tree of large size. Its fresh, bright green tint and long, wavy branches make it very attractive. Each, 6 to 8 feet, 50c.

Colorado Blue Spruce. Few trees are as much sought for as this. Large quantities are sold, but the really silver-blue varieties are not plentiful. The tree forms a dense, pyramidal specimen, with stiff, pungent foliage and clusters of cones. Hardy. Eighteen to 24-inch, each, \$1.00; doz., \$10.00; 2 to 3 ft., each, \$2.00; doz., \$20.00; 3 to 4 ft., each, \$3.00; doz., \$30.00.

Fir Balsam. A well known and popular tree, assuming the upright or conical form, foliage dark green above, silvery beneath; retains its color throughout the severest winters. Eighteen to 24-inch, each, 40c; doz., \$4.00; 2 to 3 ft., each, 75c; doz., \$7.50; 4 to 5 ft., each, \$1.00; doz., \$10.00; 5 to 6 ft., each, \$1.50; doz., \$15.00.

Teas' Weeping Mulberry.

Colorado Blue Spruce.

Weeping Willow.

Evergreens

Hemlock Spruce. An evergreen of great value. Hardy and of quick growth. Easy to move and quick to recover after transplanting. Highly ornamental, good for hedges and screens. In fact, are the best hedge trees obtainable. We quote for strictly high grade single specimens. Each, 3 feet, \$1.00; \$10.00 per 12; 4 feet, \$1.50; \$15.00 per 12. Ask for prices of seedlings in 100 and 1,000 lots.

Spruce (Norway). A lofty elegant tree of perfect pyramidal habit, remarkably elegant and rich; as it gets age has fine, graceful, pendulous branches; it is exceedingly picturesque and beautiful. Very popular, and deservedly so, and should be largely planted. One of the best evergreens for hedges. Each, 12 to 15 inches, 15c; \$10.00 per 100; 1½ to 2 feet, 25c; \$2.00 per 100.

Deciduous Hedge Plants

California Privet. A species of unusual beauty that has become the most popular of all hedge plants. For groups and specimens it is equally pretty, and its shining leaves give it value for porch and terrace decoration when grown in standard form. Can be sheared to any desirable shape. Per 100, \$6.00.

Osage Orange. One year, per 1,000, \$3.50; 2-year, per 1,000, \$4.00.

Barberry. The green leaved Barberry is rapid in growth, and soon produces wood enough with a little shearing to make a good hedge. The branches are covered with thorns, and for this reason it can be used both as a hedge and a barrier to cattle and other stock. After the leaves have fallen in the fall its branches are covered with bright red berries. Per 100, \$6.00.

Arbor Vitae. One of the finest evergreens for hedges. It grows rapidly and soon forms a beautiful hedge. Very dense. Of course it is not adapted to turn stock, but it forms a desirable and ornamental screen to divide the lawn from other parts of the grounds, or for any other purpose. Each, 10 to 15 inches, 15c; \$1.50 per 12; \$10.00 per 100; 1½ to 2 feet, 25c; \$2.25 per 12; \$18.00 per 100.

Pyramidal Arbor Vitae.

A superb, new and hardy sort, of very compact habit, like the Irish Juniper. Is rare and beautiful, and is largely planted in cemeteries. This is perhaps the most valuable Arbor Vitae in cultivation. Its extreme hardiness and adaptability to all soils make it a satisfactory tree for practical purposes where a tall formal tree is desired. Each, 2 feet, 50c; \$5.00 per 12; 3 feet, \$1.00; \$10.00 per 12; 4 feet, \$1.50; \$15.00 per 12.

Juniper (Virginian) (Red Cedar). A well known American tree, with deep green foliage. Makes a fine ornamental hedge. Each, 1½ to 2 feet, 40c; small one year plants, 3 to 4 inches high, \$4.00 per hundred.

Juniper (Irish). Erect and formal in habit. Foliage deep green and very compact, making a splendid column, fifteen to twenty feet high;

Irish Juniper.

much used in cemeteries. Each, 15 to 18 inches, 40c; 1½ to 2 feet, 50c.

Trees Recommended for Various Purposes.

FOR STREETS. American Elm, Sugar and Silver Maple, Carolina Poplar, Norway Maple.

FOR DRIVEWAYS. Norway Maple, Catalpa Speciosa, American Linden, Horse Chestnut.

SINGLE SPECIMENS for Large Growth. Birches (particularly Cut-leaf Weeping), American Linden, Norway, Purple Norway, Sycamore and Cut-leaf Maples, Horse Chestnut, Austrian, White and Scotch Pines, Norway and Colorado Spruces.

SINGLE SPECIMENS OF MEDIUM GROWTH—Horse Chestnut, Ash, Flowering Thorn, Hemlocks, White Pines, etc.

Hardy Climbing Vines

Ornamentals of this class are so hardy, so easily grown, and so beautiful that they deserve greater attention than they receive. No artist can produce pictures equal to the wealth of beauty displayed by the elegant Wistaria, the graceful Honeysuckle, or the charming and magnificent Clematis when in the glory of full bloom, and there is nothing in art that will in any degree compare with the gorgeous autumnal hues of the Ampelopsis.

AMPELOPSIS.

VIRGINIA CREEPER, OR AMERICAN IVY.

A. Quinquifolia. A native vine of rapid growth, with large, luxuriant foliage, which in autumn assumes the most gorgeous crimson and purple coloring. Each, 25c.

A. Veitchii. Japan. Leaves a little smaller and more ivy-like in form than the foregoing. Overlapping each other they form a dense sheet of green. It grows rapidly and clings to the surface of even a painted brick wall with great tenacity. The foliage is especially handsome in summer, changing to scarlet. Each, 25c.

Hall's Japan. Excellent for covering trellises, dry banks, fences, etc., giving dense, almost evergreen foliage. Has very fragrant yellow flowers, in constant succession. The best. Each, 25c.

Scarlet Trumpet. One of the showiest honeysuckles, with long, tubular, crimson flowers, in bunches during the summer, followed by ornamental scarlet berries. Each, 25c.

Monthly Fragrant. Flowers red and pale yellow. Sweet scented during the summer. Each, 25c.

Hall's Japan Honeysuckle.

Climbing Vines

CLEMATIS.

The different varieties and species of Clematis now in cultivation are of the highest beauty and utility. They vary greatly in their foliage and flowers, and are adapted to various uses. Some of them, such as our *C. paniculata* from Japan, are very fragrant and are particularly attractive on this account. The large flowered varieties, like the well known *C. Jackmani*, are extremely showy and produce great numbers of their beautiful flowers.

These plants are trained on trellises, and over porches and pillars. All are hardy, of easy growth, and will adapt themselves to nearly or quite all soils.

Of all the vines used, either for shade or decoration, none can compare with the Clematis in its many and varied forms. While the large flowered kinds are not so good for shade until they attain considerable age their wealth of bloom makes them the grandest embellishments to the porch known.

C. Paniculata. The most rapid grower of its class. This new Clematis, a native of Japan, has proven entirely hardy, no climbing plant possesses its hardiness and vigor of flowering qualities. Very fragrant, foliage beautiful dark green. Each, 50c.

C. Madam Ed. Andre. Nearest approach to bright red, a distinct crimson red; very free bloomer. Each, 50c.

C. Henryi. Fine, large, creamy white flowers. One of the best of the white varieties; a perpetual bloomer. Each, 50c.

C. Ramona. A strong, rapid grower and very hardy. Flowers very large, color a deep sky blue. Each, 50c.

WISTARIA.

American (*W. Frutescens*). A smaller, more slender form than the Chinese, with smaller clusters of purple flowers. Each, 25c.

Chinese Purple (*W. Sinensis*). A most beautiful climber of rapid growth, and producing long, pendulous clusters of pale blue flowers. When well established makes an enormous growth. It is very hardy, and one of the most superb vines ever introduced. Each, 25c.

Chinese White (*W. Sinensis Alba*). Introduced by Mr. Fortune, from China, and regarded as one of his greatest acquisitions. Each 25c.

Hardy Ornamental Shrubs

Nothing adds more to the beauty of a place than to have the sides and background well filled with nicely arranged groups of shrubbery. Until seen one cannot appreciate the effect that can be brought out by properly arranging and grouping the wonderful assortment of foliage ranging in color from the darkest green and purple to light orange and silver tan. Added to this the great variety in blossoms unite to keep up a never-failing interest. If you do not know how to arrange them let us help you.

Almond, Double Flowering. A desirable class of early flowering shrub. Each 25c.

Clematis Jackmani.

Althea (Rose of Sharon). Showy, beautiful flowering shrub. Flowers large, very brilliant and of striking colors. Blooms freely in August and September, when few shrubs are in flower. Prevailing colors are rose, white, variegated, blue and purple. Hardy. Each, 30c.

Hydrangea (*Paniculata Grandiflora*). Probably the most popular of all shrubs. Blooms in August and September, when we have few shrubs in bloom. Flowers are white, borne in pyramidal panicles, often a foot in length. Excellent alike for masses or for single specimens. Each, 35c; \$5.00 per 12.

Tree Shaped Hydrangea. These are fine specimen plants, four to five years old, trained to tree shape, with about three feet of straight stem and nicely shaped heads. Should bloom profusely the first year. Before shipping they are trimmed the proper length for planting, so that they will make a better growth and larger flowers. Each, 50c; \$5.00 per 12.

Lilac (Purple and White). Each, 2 to 3 ft., 25c; \$2.00 per 12; 3 to 4 ft., 30c; \$2.50 per 12.

Persian Lilac. Each, 40c; \$2.50 per 12.

Purple Fringe (Smoke Bush). A conspicuous shrub or small tree with large leaves. These are overhung in mid-summer by cloud-like masses of very light mist-like flowers, having the appearance of smoke at a distance. Each, 2 to 3 feet, 30c; 3 to 4 feet, 40c.

Snowball. A fine shrub or bush. Flowers very large and showy. Blooms early. Borne in clusters of five or six. Ten to twelve feet high. Blossoms in May. Each, 3 to 4 feet, 25c.

Spirea (Anthony Waterer) Red. This beautiful variety has the same habits as its parent, the Bumalda. It blooms about the close of June, continuing throughout the entire season. A striking and attractive shrub. Each, 15 to 18 inches, 25c; \$2.00 per 12.

Spirea (Van Houttei), White. Without doubt the grandest of all Spireas; beautiful at any season, but when in bloom is a complete fountain of white flowers, the foliage hardly showing. Perfectly hardy and an early bloomer. Each, 2 to 3 feet, 25c; \$2.00 per 12.

Weigelia Rosea. A beautiful shrub with rose colored flowers in May and June. Each, 25c.

Wistaria.

Roses

GIANT IRONCLAD ROSE COLLECTION.

Selected for our customers who want roses that will stand the severest climate and give satisfactory results and blossoms everywhere.

Think of having roses blossoming at your very door, sending their fragrance to meet you the moment you cross the threshold, yielding enough flowers to fill every room in the house with exquisite scent and loveliness from June until October! Would not such a garden appeal to you? You can have it for very little money.

We carry none but the very hardest varieties and the finest and freest bloomers. Many varieties offered by eastern catalogues are too tender. Hot-house roses are worthless for outdoor planting—ours are field-grown.

ROSE ROOTS—Our roses grown on their own roots, not grafted, are more easily transplanted and hardier.

How To Grow Roses.

GET GOOD HEALTHY PLANTS. Dormant plants, field-grown, are better than hot-house roses, which are tender and apt to be infested with insects, fungus, etc. You can depend upon our roses.

1. **WHEN TO PLANT.** Plant as early in the spring as you can after the frost has gone out. The month of April and first of May is about right.

2. **WILTED OR DRIED PLANTS.** If the plants come in a wilted condition soak them, roots and tops, in blood-warm water. This will do them good, even if not dried. Wet the roots well just as you plant them, so the earth will adhere. When the hole is half filled up pour in water, and then fill up with dirt, but pour no more water in. This keeps soil from baking.

3. **PRUNING.** By all means cut off nearly all the tops, leaving on four to six inches. Don't fail to cut tops off before planting; not after. This is one of the most important things in planting roses.

4. **ROSES ON OWN ROOTS.** Don't fail to buy roses on own roots. On budded roses sprouts from roots are not true to name. Our Roses are on Own Roots.

5. **ROSES AND SUNSHINE.** They need all they can get. Do not like shade or wet soil.

6. **IN THE SPRINGTIME** cut off all decayed or injured parts.

7. **PREPARING ROSES FOR WINTER.** There is nothing more important in rose culture than caring for them in the winter. There are a number of methods:

FIRST. Lay the plants down and cover up with loose soil, and when frozen cover with mulching. Uncover in the spring. This is a good method.

SECOND. Cut all bush roses to the ground, burn up the brush and cover up the stubs with soil and mulching; uncover in the spring.

Hybrid Perpetuals.

Originated by crossing tea roses with hardy kinds. Bush form; erect growth; hardy and bloom from June till frost.

ANNA DE DIESBACH. Brilliant rose color, long pointed buds, perfectly formed blossoms. A vigorous grower and persistent bloomer.

COQUETTE DE ALPS. White, tinged with pale rose; hardy; blooms every day.

GEN. JACQUEMINOT. Vivid crimson; the very best rose and hardiest.

CLIO. The flowers of this rose are simply perfection in form, beautiful at all stages of development; color delicate satin blush.

PAUL NEYRON. Deep rose, immense size, strong grower; very hardy.

GENERAL WASHINGTON. Perfectly double, soft scarlet, large and fine.

LA REINE. Clear rosy pink.

MARSHALL P. WILDER. Pink carmine, fine bloomer; flower large.

MRS. JOHN LAING. A beauty in clear, bright shining pink. Full blooms on long stiff stems.

MAGNA CHARTA. Splendid sort; bright, clear pink, sweet-scented.

JOHN HOPPER. Bright rose pink, large, full; very hardy.

PRICES ON ROSES:

	1	3	6	12
Hybrid Perpetual	\$0.25	\$0.60	\$1.00	\$1.75

Hardy Climbing Roses.

Desirable for covering trellises, walls or porches, as they succeed under any circumstances, blooming in clusters of medium sized flowers profusely throughout the season.

ANNA MARIE. Rosy pink, changing to blush.

BALTIMORE BELLE. Very double, blush white.

DAWSON. Flowers very double; bright carmine.

EMPRESS OF CHINA. Bright pink flowers, practically ever-blooming.

MULTIFLORA JAPONICA. Blooms in clusters of pure white, perfectly hardy, and a very rapid grower.

PRAIRIE QUEEN. Always popular, bright rosy red.

RUBY QUEEN. Deep ruby red, with shiny leathery foliage.

SEVEN SISTERS. Crimson, changing all shades, to white. Each, strong plants, 25c; \$2.50 per 12.

Rambler Roses.

No class of roses has come into popular favor so rapidly as these. Of hardy, sturdy nature, a vigorous and quick grower, producing the lovely flowers in truly wonderful profusion. The flowers are borne in immense clusters, each one forming a nice bouquet in itself. Hardy everywhere.

CRIMSON RAMBLER. It is a vigorous grower, making shoots ten to twenty feet high in a single season. Flowers glowing crimson and produced in immense panicles, covering the plant from top to bottom. The blooms remain a long time without losing their brightness. This rose improves upon acquaintance; the better it is known the more popular it becomes. Each, 35c; 2 for 60c.

Baby Rambler.

The ever-blooming Dwarf Crimson Rambler. Blooms Out-of-Doors Every Day from June till Frost. Every Day Under Glass. Hardier even than the famous Crimson Rambler.

GRANDEST BEDDING ROSE KNOWN. Plant half a dozen in a small bed 15 to 18 inches apart and see them bloom.

No rose in existence equals it in blooming quality. Plants grow only from twenty-four to thirty inches.

BABY RAMBLER IS A SUPERB ROSE FOR POT CULTURE. As a bedding variety none possess more points in genuine merit than Baby Rambler. A single plant, grown in a pot, is a marvel in neatness. Will thrive and bloom with ordinary treatment from one year's end to another. Indeed, they will never be without flowers if kept in a growing condition. As a pot plant for winter blooming it has no equal. It stands alone and will find a place everywhere.

The Baby Rambler Rose never gets tired. Works at blooming day and night and every day in the year.

PRICES: Largest size, 40c each; 2 for 75c; 6 for \$2.00.

Ornamental Trees

Extra Select Stock.

Hardy trees and shrubs can now be obtained at moderate cost that will stand the extremes of temperature and soil of nearly all sections. Judicious selection will obtain deciduous and evergreen trees, shrubs, vines, etc., that make beautiful specimens throughout the entire year.

Nursery-grown trees are pre-eminently superior and worth more than trees dug from the woods. In the nursery trees are grown with the idea of getting a perfect shape with fully developed root systems. They are carefully pruned and cultivated. In the forest it is impossible to get trees as smooth and straight with the necessary fibrous roots.

Elm. Everyone is familiar with the elm. Its hardihood, its fine spreading branches, and, above all, its durability, make it the most desirable of shade trees. The grand and venerable old elm, under whose protecting shade Washington took command of his Continental army, is still standing at Cambridge. We offer it in sizes to suit everyone. Nine to ten feet, 40c; eight to nine feet, 35c; seven to eight feet, 30c; six to seven feet, 25c.

Box Elder. Very smooth, thrifty tree. A rapid growing shade tree. Hardy everywhere. Eight to nine feet, 40c; seven to eight feet, 30c; six to seven feet, 20c.

Soft Maple. One of the handsomest of all shade trees, regular in outline, with beautiful leaves. Hardy and rapid in growth. We offer choice, smooth trees, well suited to lawn, street or park planting. Ten to twelve feet, 60c; nine to ten feet, 40c; eight to nine feet, 25c; seven to eight feet, 20c; six to seven feet, 15c.

Catalpa Speciosa. Do not confuse this with the tender Catalpa Bignonioides. Catalpa Speciosa is hardy and superior in every way. An erect, rapid growing tree, with broad, dark green leaves and beautiful perfumed blossoms. Easy to transplant. Never suffers from borers or insect enemies. Ten to twelve feet, 50c; nine to ten feet, 40c; eight to nine feet, 35c; seven to eight feet, 20c.

Linden. A rapid growing, beautiful tree, with rich green foliage and fragrant flowers. Symmetrical in growth. Very choice. Eight to nine feet, 40c; seven to eight feet, 30c.

Sycamore. A fine tree with broad, spreading top and deep green foliage. Eight to ten feet, 40c.

White Birch. A beautiful, graceful tree with slender branches, drooping slightly at the tips. The white bark contrasts pleasingly with the green leaves. One of the most striking, richest looking of all shade trees. Six to seven feet, 40c.

Mt. Ash. Seven to eight feet, 40c; six to seven feet, 30c.

Ash. Seven to eight feet, 30c; six to seven feet, 20c.

Evergreens (Transplanted)

We want to call your attention to the fact that we have a very complete stock of hardy nursery-grown evergreens, and shall be glad to make quotations if you will send list of requirements. All orders are dug same day as shipped, and great care is used to keep roots from exposure.

FOREST TREE SEEDLINGS BY THE MILLION.

All our seedlings are nursery-grown, hardy, healthy and stocky plants, with good root system. They will give the very best results everywhere. Do not compare our prices for our select seedlings with those quoted in some catalogues.

We furnish 50 at the 100 rate; 500 at 1,000 rate; 5,000 at 10,000 rate.

Ash, White	8-12 inches	\$0.65 per 100;	\$ 4.50 per 1,000;	\$ 35.00 per 10,000
Ash, White	12-18 inches	.90 per 100;	7.00 per 1,000;	50.00 per 10,000
Ash, White	18-24 inches	1.20 per 100;	10.00 per 1,000;	
Boxelder	12-18 inches	1.00 per 100;	7.50 per 1,000;	58.00 per 10,000
Boxelder	18-24 inches	1.25 per 100;	10.00 per 1,000;	75.00 per 10,000
Catalpa Speciosa	4-8 inches	.50 per 100;	3.50 per 1,000;	25.00 per 10,000
Catalpa Speciosa	8-12 inches	.75 per 100;	5.00 per 1,000;	40.00 per 10,000
Catalpa Speciosa	12-18 inches	1.25 per 100;	10.00 per 1,000;	75.00 per 10,000
Elm	12-18 inches	.75 per 100;	5.50 per 1,000;	40.00 per 10,000
Elm	18-24 inches	1.00 per 100;	7.50 per 1,000;	50.00 per 10,000
Locust, Black	8-12 inches	.55 per 100;	3.75 per 1,000;	25.00 per 10,000
Locust, Black	12-18 inches	.75 per 100;	5.00 per 1,000;	35.00 per 10,000
Locust, Black	18-24 inches	.85 per 100;	6.00 per 1,000;	45.00 per 10,000
Maple, Soft	12-18 inches	1.00 per 100;	7.50 per 1,000;	58.00 per 10,000
Maple, Soft	18-24 inches	1.25 per 100;	10.00 per 1,000;	75.00 per 10,000
Mulberry, Russian	8-12 inches	.55 per 100;	3.75 per 1,000;	25.00 per 10,000
Mulberry, Russian	12-18 inches	.70 per 100;	5.00 per 1,000;	37.50 per 10,000
Mulberry, Russian	18-24 inches	.90 per 100;	7.00 per 1,000;	47.50 per 10,000
Cottonwood	8-12 inches	.45 per 100;	3.50 per 1,000;	25.00 per 10,000
Cottonwood	12-18 inches	.60 per 100;	4.50 per 1,000;	35.00 per 10,000
Cottonwood	18-24 inches	.70 per 100;	5.50 per 1,000;	42.50 per 10,000
Willow, Diamond	12-18 inches	.60 per 100;	4.50 per 1,000;	35.00 per 10,000
Willow, Diamond	18-24 inches	.70 per 100;	5.50 per 1,000;	42.50 per 10,000
Walnut, Black	8-12 inches	1.00 per 100;	9.00 per 1,000;	75.00 per 10,000
Walnut, Black	12-18 inches	1.50 per 100;	12.50 per 1,000;	100.00 per 10,000
Walnut, Black	18-24 inches	2.00 per 100;	15.00 per 1,000;	125.00 per 10,000
Butternut	12-18 inches	2.00 per 100;	15.00 per 1,000;	125.00 per 10,000

We have a very large quantity of Norway and Carolina Poplars, Russian Golden and Laurel Leaf Willows. These are especially adapted for Prairie planting. Their hardiness and quick growth make them indispensable for windbreaks. For our special low prices write for prices.

Seedlings By Mail. We Pay Postage.

White Ash	8-12 inches	\$0.80 per 100;	\$5.50 per 1,000
Black Locust	8-12 inches	.65 per 100;	4.50 per 1,000
Catalpa Speciosa	4-8 inches	.60 per 100;	4.25 per 1,000
Catalpa Speciosa	8-12 inches	.85 per 100;	5.75 per 1,000
Cottonwood	8-12 inches	.65 per 100;	4.25 per 1,000
Russian Mulberry	8-12 inches	.65 per 100;	4.50 per 1,000

OUR NURSERY LIST IN THIS CATALOGUE IS GREATLY ABRIDGED FOR WANT OF SPACE, BUT COVERS IN A GENERAL WAY MOST ALL THE BEST AND MOST PRACTICAL VARIETIES. IF YOU DO NOT FIND WHAT YOU WANT WRITE FOR OUR FULL AND COMPLETE NURSERY CATALOGUE, AND IT WILL BE MAILED FREE TO YOU.

Address RATEKIN NURSERY CO., Shenandoah, Iowa.

Index

Farm Seeds

	Page
Corn, Alaska Northwest Dent	24
Corn, Big Banner White	13
Corn, Boone County White	18
Corn, Calico, Improved	18
Corn, Diamond Joe's Big White	7, 8
Corn, Extra Early Pride of North	21
Corn, Extra Early Minnesota No. 13	22
Corn, Extra Early Queen of Nishna	24
Corn, Extra Early Dibble's Mammoth Yellow Dent	26
Corn, Extra Early Minnesota King	19
Corn, Extra Early Silver King	23, 24
Corn, Gold Standard Leaming	21
Corn, Fodder and Ensilage	28, 29
Corn, Hickory King	20
Corn, Iowa Silver Mine	11, 12
Corn, Iowa Gold Mine	19
Corn, Johnson County White	19
Corn, Legal Tender	19
Corn, Longfellow Flint	27
Corn, Reid's Yellow Dent	10
Corn, Ratekin's Mammoth Iowa Yellow Dent	14, 15
Corn, Ratekin's Pride of Nishna	16, 17
Corn, Ratekin's Imperial White	20
Corn, Ratekin's Dakota Bloody Butcher	22
Corn, Ratekin's Gold Standard	25
Corn, Ratekin's Imp. Early Yellow Flint	27
Corn, Saint Charles White	18
Corn, Sanford's White Flint	26
Corn, White Cap Dent	25
Corn, Wallace's Favorite	10

Field Seeds and Forage Crops

Alfalfa	48
Artichoke Roots	42
Barley, Giant White Hulless	37
Barley, Manshury	37
Barley, Success Beardless	37
Barley, Oderbrucker (Wis. No. 55)	38
Beets, Stock or Mangel Wurtzels	43
Buckwheat	44
Broom Corn	44
Bromus Inermis	45
Carrots, Stock	43
Cow Peas	44
Flax	45
Grasses and Clovers	46, 47
Grass Mixtures	48
Jerusalem Corn	41
Kafir Corn	41
Millets	49
Milo Maize, Yellow	41
Oats, Ratekin's New Alberta	30, 31
Oats, Big Banner 100 Bushel	32
Oats, Ratekin's New Kherson	33
Oats, Lincoln	33
Oats, Ratekin's Early Champion	33
Oats, New Sensation	34
Oats, Ratekin's Regenerated Swedish Select	35
Oats, Ratekin's Texas Red Rust Proof	36
Oats, Imp. White Russian	36
Pencillaria	40
Panicum Crugalli	42
Potatoes, Irish	50, 51, 52, 53
Potatoes, Sweet	53
Rye, Mammoth Wonder White	40
Rye, Mammoth Spring Rye	40
Rape, Dwarf Essex	40
Speltz or Emmer	36
Sunflower, Mammoth Russian	42
Sojo Beans	44
Teosinte	41
Timothy	45
Timothy and Alsike Mixture	46
Vetches	42
Wheat, Spring varieties	38
Wheat, Winter varieties	39

Vegetable Seeds

Asparagus	57
Artichokes	57
Beans, Bush or Snap	58
Beans, Pole or Climbing	61
Beans, Wax sorts	59
Beans, Lima	60

	Page
Beets	61, 62
Brussels Sprouts	57
Bore Cole	57
Cabbage	62, 63, 64
Cauliflower	65
Carrots	65
Chufas or Earth Almond	65
Cress	65
Celery	66
Corn, Sweet or Sugar	66
Corn, Pop	67
Cucumbers	68
Egg Plant	69
Home Garden Collection	85
Kale or Bore Cole	69
Kohl Rabi	69
Leek	69
Lettuce	70, 71
Melons, Musk	71, 72, 73
Melons, Water	76, 77, 78
Onions Seeds	78, 79
Onion Sets	79
Okra or Gumbo	80
Parsnips	81
Parsley	80
Peas, Garden	81, 82
Peanuts	81
Peppers	80
Pumpkins	79
Radishes	83
Rhubarb, New Ideal Mammoth	84
Ruta Baga, or Swedish Turnip	90
Salsify or Vegetable Oyster	84
Special Collection of Vegetable Seeds	86
Spinach	84
Squash	85
Tomatoes	87, 88, 89
Tobacco	84
Turnips, Table	89

Flower Seeds

Antirrhinum	92
Asters	91
Algeratum	92
Bachelor's Buttons	92
Camelia, Flowered	91
Camelia, Double Flowered	92
Canna	92
Calceolaria	92
Canterbury Bells	92
Carnation	92
Cineraria	92
Cypress Vine	92
Candytuft	92
Chinese Pinks	92
Calliopsis	92
Coccomb	92
Cosmos	92
Chrysanthemum	92
Daisy	92
Dahlia	92
Dianthus	92
Empress	92
Fox Glove	92
Forget-Me-Not	92
Four O'clock	92
Gourds	92
Geranium	93
Gallardia	93
Hybridus Mixed	92
Heliotrope	93
Hollyhocks	93
Hibiscus	93
Hiacinthus Candicans	93
Ice Plant	93
Lady Slippers or Touch-Me-Not	91
Larkspur	93
Latana	93
Marigold	93
Mignonette	93
Morning Glories	93
Moon Flower	93
Nasturtium	93
New Giant Snowball	92
Pansy	93
Petunias	93
Portulaca	93
Ricinus	93
Sweet Williams	93
Sunflower	93
Salpiglossis	93
Salvia	93
Stocks	93
Sweet Peas	93
Wallflower	93
Zanzibarensis	93

Nursery Department

	Page
Apples, Summer	97
Apples, Fall	99
Apples, Winter	100
Apples, Crab	100
Apricots	103
Asparagus	105
Ampelopsis	108
Blackberries	103
Cherries	102
Currants	105
Clematis	109
Dewberries	105
Deciduous Trees	106
Deciduous Hedge Plants	108
Evergreens	108
Gooseberries	105
Grape Vines	103
Horse Radish	105
Hardy Climbing Vines	108
Mulberries	103
Nut Trees	106
Peaches	101
Pears	101
Plums, European	102
Plums, Japanese	102
Raspberries	104
Roses, Hybrid Perpetuals and Climbers	110
Rhubarb or Pie Plant	105
Special, Nursery Bargain Collections	97
Strawberries	104
Seedlings, Forest Tree	111
Seedlings, By mail	111
Shrubs, Hardy Ornamental	109
Weeping Deciduous Trees	107
Wistaria	109

Miscellaneous

Terms and General Information	
About Ordering	1
Freight Rates	2
Where We Are Located	3
The Beautiful Nishna Valley of Southwestern Iowa	3
Corn, Its Importance and Value to the American Farmer	4
Good Seed Corn, What is it? Method of Selecting and Handling	4, 5
How Our Seed Corn is Handled	5
The World's Greatest Yielding White Corn	6
What the People Say About Diamond Joe's Big White	9
Table Showing Quantities of Seed Usually Sown per Acre	17
Money in Pop Corn	20
What is a Bushel of Seed Corn Worth	27
What is Speltz? Its Culture	36
Change Your Seed Wheat	38
Testimonials. Listen to the People	54
Wholesale Price List to Market Gardeners	55, 56
Books on Vegetable Gardening	57
Garden and Farm Calendar	90
The Cyclone Seed Sower	95
How to Clean Your Seed Grain	95
Our Magnificent Government Building	95
Planet Jr. Tools for 1914	96
My Free Delivery Offer on Nursery Stock	98
How to Plant Nursery Stock	106

FAMEUSE OR SNOW

RATEKIN NURSERY CO.

**Fruit and Ornamental Trees,
Shrubs, Roses, Climbing
Vines, Etc.**

**1200 Acres Nursery Stock to
Select Your Orders From**

**LOOK! GIVE LOOK!
HERE! YOURSELF A SQUARE DEAL
HERE!**

A \$30.00 ORCHARD FOR \$10.00

RATEKIN'S BIG BIGGEST BARGAIN OFFER!

88 Plants At Actual Cost---Think Of it!

HERE'S YOUR CHANCE TO BUY YOUR TREES RIGHT

HERE THEY ARE!

20 Apple Trees	4 to 5 feet high	88 PLANTS ALL FOR \$10.00
5 Pear Trees	4 to 5 feet high	
6 Grape Vines	2 years old	
5 Plum Trees	3 to 4 feet high	
10 Peach Trees	3 to 4 feet high	
6 Currant Bushes	2 years old	
6 Raspberry Bushes	Extra Strong Tops	
5 Pie Plants	Extra good plants	
25 Asparagus	Makes nice crisp growth	

ORDER this collection now. Pin a \$10 Postoffice Order, Express Order or Check to this sheet and mail it to us today. These plants are absolutely good, strong, sturdy boys, A No. 1 in every respect and don't forget that my price of \$10 for this wonderful collection of 88 plants is absolutely cost price to us. We want your business of course, but first of all we want to show you that we have the goods, therefore we are making you this great big bargain offer. **ORDER IT NOW.**

All carefully packed, f. o. b. Shenandoah.

**HERE ARE THE
VARIETIES**

Apple.....	5 Northwestern Greening
	5 Ben Davis
	5 Duchess of Oldenburg
	5 Wealthy
Pears.....	3 Keiffer
	2 Duchess
Grapes.....	3 Concord
	3 Niagara
Plums.....	2 Abundance
	3 Burbank
Peaches.....	5 Alberta
	5 Bokara
	3 Cherry
Currants.....	3 Fay's Prolific
	3 Cumberland
Raspberries.....	3 Kansas Black
Pie Plant.....	5 Plants
Asparagus.....	25 Plants

RATEKIN NURSERY COMPANY

SHENANDOAH, IOWA

Write Me A Letter

PERSONAL TO YOU.

In my catalogue I have tried to give honest descriptions and to make everything plain, but after you have looked it over if there are any questions you have to ask, WRITE ME and I will be pleased to give you any further information I can. I am always busy, but never too busy to read letters from my friends and customers. In fact, I am more than glad to hear from them in regard to their experience and results from any seeds or nursery stock ordered, received or wanted from me. In addition to this I shall always be pleased to receive photographs of any specimen vegetable or farm crops grown from seeds obtained from me, also photograph of yourself.

I like to know what kind of land you have and what kind of crops you are interested in or grow, also what purposes you have in mind as to use of products and such other points as you may have in view.

Pen, ink and paper are not always at hand, but I have left a blank space below for you, if you haven't other material convenient, and I want you to write me. Possibly I can help you in some way in making your selections, and if so I will try in every way I can.

I AM GOING TO MAKE A FREE DISTRIBUTION OF FIVE THOUSAND DOLLARS' WORTH OF GARDEN AND FLOWER SEEDS THIS YEAR TO MY CUSTOMERS, and extra seeds will be sent with every order for garden and vegetable seeds amounting to 50 cents and over, but I don't know what kind of seeds you would rather have, so you should indicate what you would prefer in your orders and I will be glad to put them in FREE—ABSOLUTELY FREE.

Sincerely yours,

RATEKIN'S SEED HOUSE.

By J. W. RATEKIN, Mgr.

Your name

Post OfficeStateDate

Big, New, Pure, Imported Seed Oats

This is a true Photograph of a Field of Ratekin's Big Alberta Oats

THE BEST SEED OATS IN THE WORLD!

These truly wonderful Northern Grown Oats have been proven, in thousands of tests by American farmers, to be the greatest all-purpose oats—the biggest, plumppest, most vigorous oats—EVER PRODUCED! Space will not permit us to tell you here what we would like to tell you about this wonderful New Alberta Canadian oats, and what it has done for hundreds of our customers in almost every state in the Union, many of whom thought they could not raise good oats at all because there ground was too rich, etc. You can raise good oats if you put them in right with the right kind of seed, and year in and year out, there is no crop that is more sure or a bigger payer.

A SAMPLE OF OUR NEW ALBERTA OATS WILL BE SENT ON REQUEST. A POSTAL CARD WILL BE SUFFICIENT.
Address RATEKIN'S SEED HOUSE, Shenandoah, Iowa

Wonderful is the World!

Wonderful, Wonderful are
Ratekin's New Alberta Oats
GENUINE CANADIAN GROWN

NO OATS EQUAL TO THE ALBERTA

of straw. Another most important advantage of Ratekin's Alberta Oats to the farmer is the fact that they have been thoroughly cleaned by the latest and most improved machinery, and are absolutely free from weed seeds.

Now I have given no exaggerated or overdrawn description, but can confidentially recommend these oats and assure all that they will come up to the full measure of your expectations. In fact, out of the thousands of bushels we have sent out **WE HAVE NEVER HAD A COMPLAINT OR DISAPPOINTED CUSTOMER.**

WHAT I WOULD LIKE TO SEE this year would be that every farmer who has one acre or more ground to sow in oats, would be, to **SOW IT TO OUR NEW ALBERTAS.** It will require $2\frac{1}{2}$ bushels per acre. The seed will cost you for one acre but \$5 00, or \$18 00 for enough to plant four acres. Now we are not going to tell you exactly how much these four acres will yield, but with good ground, well prepared, under normal conditions they will make you a yield that will be an eye-opener to you and to your entire neighborhood, and will enable you to sell all your surplus at a handsome price for seed.

RATEKIN'S NEW ALBERTA OATS

What They Are Early, Most Productive, Highest Grade in the United States; None Genuine, Imported Alberta Oats, Except Direct from Ratekin's Seed House.

The Biggest, Best and Grandest variety ever introduced into this country. **NONE LIKE THEM.** We first introduced these oats four years ago and they gave such wonderful results everywhere from the start, we were encouraged the following year to purchase 15 carloads, or 20,000 bushels of them, meantime sent out over fifty thousand samples. Everywhere they captivated the grain growing farmer, as a result we sold out long before the season was over and could of sold many more if we had had them. Everywhere they proved a great success—the wonder of the **OAT WORLD.** In view of the increased demand and enormous yields, we established a purchasing agent at Calgary, Alberta, in the great grain growing district of Western Canada, in 1911, 1912 and 1913. Our agent at that point has been with us here in the seed business for many years, who made the study of farm seeds a specialty for years, especially seed oats, and other small grain and perhaps has no superior in judgment as to quality and varieties anywhere. During the past three seasons we have had him watching crops before and at the time harvested, locating the best only that that wonderful small grain country produces, and we are again pleased to say we have purchased 25,000 bushels of the cream of the very best **NEW ALBERTA OATS** to be found or located in that country, for our trade.

Since we introduced this Grand Oat it has steadily and deservedly gained in popularity, until to-day it is the most popular High-Grade White Oat in the United States. The climate of America is unsuited to the production and maintainance of the highest grade of Oats, and unless a heavy imported Oat be used for seed purposes at least every three or four years, they become light, "chaffy," inferior in quality and unprofitable. The ultimate financial benefit accruing to the American farmers by the annual distribution of thousands of bushels of Ratekin's New Alberta Oats cannot be overestimated. These oats weigh naturally 50 lbs. per measured bushel, and they deteriorate in weight only from three to four lbs. each year they are grown here, so that the product is worth for seed purposes at least double the market value of ordinary Oats. No other Oat can show such a record—75 to 150 bushels per acre, and double the usual quantity

A FIELD OF RATEKIN'S ALBERTA, CANADA, OATS

GET THE GENUINE ALBERTA OATS from headquarters. We are the only Seed House in America that keeps a man on the ground during the growing, harvesting and threshing season; thus insuring **GENUINE, SELECT, PURE STOCK.**

Some farmers think our prices too high for seed enough to plant there entire crop, but we can't sell these select seed oats at less, owing to freight 1,800 miles and duty on oats from Canada, but the increased yield in quantity and quality make them the cheapest seed anyone can plant or sow.

EVERY GRAIN GROWING FARMER SHOULD SOW AT LEAST FIVE OR TEN ACRES OF THESE OATS THIS YEAR. Get in shape to grow your own seed another year, and supply your neighbors with their seed. All will sit up and think with their hats off when they see you harvesting a **HUNDRED BUSHEL CROP** while they are reaping but 20 or 25 bushels from common old run out, degenerated stock destitute of life, vigor and hardiness to make a strong, robust, quick growth.

Two years ago we sent out thousands of samples of these oats, a wealthy banker of Chicago, and a large land owner in General Illinois, while visiting at his farms, run across a sample of these oats. He immediately wired us to ship 100 bushels to his manager. Planting season was at hand and we started the seed the same day his telegram was received and inside of six days the seed was all in the ground. Do you know the results? From forty acres which he sowed there were grown 3600 bushels and there were sold from the threshing machine 3100 bushels to the surrounding farmers for seed purposes at \$1.00 per bushel; thus obtaining \$75 00 per acre with 500 bushels left for his own use and seeding purposes another year. Any active, energetic, enterprising farmer can do the same if he has got the stuff in him.

PRICES—Pound 25c postpaid; 8 lbs. postpaid \$1.50. At purchaser's expense by express or freight: Peck 65c; $\frac{1}{2}$ bu. \$1.00; 2 to 4 bus. \$1.90; 10 bus. and over \$1.80. Sacks free f. o. b. Shenandoah. We'll be glad to send you a small sample of these wonderful oats and our Big Seed Catalogue **FREE.** Or, better still, **SEND 10-CENTS for a Good-Sized Sample.**

OUR GUARANTEE: We positively guarantee our seed to be exactly like sample, free from foul seed, wild oats, and absolutely pure, because it is grown on new, clean land—grown right, harvested right and threshed right. We will refund your money and take back the seed, paying freight both ways, if you don't find this seed exactly as we guarantee it. Can you ask for a more liberal or fairer offer?

Don't put off ordering, either, until the last minute. Many people waited too long last year, and were disappointed, because they waited until the supply ran out. Sit down **NOW** and order 10, 20 or 30 bushels—or more.

RATEKIN'S SEED HOUSE, Shenandoah, Iowa

RATEKIN'S MESSAGE

TO ALL AMERICAN FARMERS

DIVERSIFY YOUR CROPS

Every farmer should diversify his crops and make every acre and rod of his land produce a profitable crop of some sort. There are a hundred varieties and items that every farm and farmer can produce that are money makers and money savers, besides if conditions should prove unfavorable for Corn, Oats, Wheat and other staple crops there are a hundred profitable crops that can be successfully grown, that you can always fall back on to carry your stock through seasons of drouth, floods and famine.

Alfalfa is King of All Crops

There is no state in the Union in which Alfalfa cannot be successfully grown. Alfalfa produces three to eight tons per acre. It does not exhaust the soil, but enriches it equal to clover. It will grow three to five crops per year. Alfalfa in money value is worth forty-five per cent. more than clover and sixty 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 farming. Its long branching roots penetrate far down into the earth, push and crowd this way and that and thus constitute a gigantic subsoiler. These become an immense magazine of fertility to be drawn upon by other crops for many years after, should you ever plow it up. Alfalfa is one of our great specialties. There is perhaps no seed offered the farmer today upon which hinges so much importance as alfalfa, clover, timothy and the grasses. Upon this seed depends largely his prosperity. We only offer you one variety, and only buy one variety, and while there may be customers of ours who will go through our catalogue looking for a second and third grade clover, etc., we must advise that they will find none, but we don't believe if they knew the true facts they would be disappointed, because every time you pay a third grade price for alfalfa, clover or grass seed you pay a larger price than if you bought the very best in the first place. This is an absolute fact, because it will take much less seed of the better grade and you don't take the chance of polluting your farm with noxious weeds. Don't forget this. Why not turn your land into \$90 an acre annual money producing crop? This is conservative. Remember our alfalfa seed is Pure, Genuine and Unadulterated. We don't sell any second grades.

Nebraska Dry Land Grown Alfalfa

The bulk of American seed is grown under irrigation and does not possess that vitality that seed does where grown under natural conditions, and as to imported, no one knows within ten thousand miles of where grown, nor nothing of its adulterations. 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—1 lb. postpaid 35c, 3 lbs. \$1.00. By freight or express, peck \$3.25, bu. \$12.00, ½ bu. at bushel price.

Turkestan Alfalfa

Seed of this Alfalfa collected in Asia have been so very satisfactory we have no hesitancy in recommending it as more hardy than the ordinary variety, having stood a temperature of forty-five degrees below zero when the ground was bare. Makes large top growth; also fine root growth. PRICE—1 lb. 40c postpaid. By express or freight at purchaser's expense, lb. 30c, bushel \$15.00, 100 pounds \$25.00.

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.

Sugar Beets and Mangel Wurzel are Corn Savers

When it comes to Heavy Yields of Succulent Stock Feeds from a Small Piece of Ground, Nothing Can Excel Mangel Wurzel Beets.

How to Grow Them

Mangel Wurzel are the most important of all root crops for stock feeding. They can be grown anywhere. Good cultivation only is necessary to insure success. The best soil for Mangel Wurzel is a loose friable loam which should be plowed deep. Do not sow Mangel Wurzel seed until May or June when the soil will be warm. Sow 5 pounds to the acre in rows, 2 to 3 feet apart, and thin to 9 inches in the rows, cultivate frequently with horse hoe. Remember, 5 pounds of our Imported Mangel Wurzel seed is sufficient for one acre. One acre of our Mangel Wurzel will yield from 40 to 60 tons of delicious feed for your stock.

Mammoth Long Red Stock Beets are Corn Savers and Money Makers

Yield 40 to 60 tons per acre. Two bushels of beets and one bushel of corn will go further than THREE BUSHELS OF CORN and always keep your stock healthy, hearty and fat. PRICE—½ lb. 20c, lb. 50c, 5 lbs. \$2.00, (postpaid.)

Improved Golden Tankard

Imported European Stock

A very popular variety with dairymen and farmers wherever grown. A rich deep yellow firm fleshed mangel.

PRICE—1 oz. 10c, ½ lb. 20c, 1 lb. 50c (postpaid) 5 lbs. (sufficient for one acre) \$2.00.

Klein-Wanzleben

Also called Diamond Sugar Beet. This variety is cultivated on a larger scale for the beet sugar factories than any other, it yields 15 to 20 per cent. of sugar. 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 of great value for feeding.

PRICE—Per oz. 10c, ½ lb. 20c, lb. 60c, 5 lbs. \$2.50, Postpaid.

Ratekin's Giant Red

Imported European Stock

Tried and Proven. Roots smooth, long and cylindrical. Wonderful growers.

PRICE—1 oz. 10c, ½ lb. 20c, 1 lb. 50c (postpaid,) 5 lbs. (sufficient for one acre) \$2.00.

Ratekin's Mammoth Mastodon Stock Carrot

This Seed Imported from Europe

This carrot is without a doubt the most productive variety for stock. They yield immensely, a thousand bushels an acre being reported by growers. The quality of Mastodon carrot is A-1. In size they often attain to 5 and 6 pounds each in weight.

PRICE—pkt. 5c, 1 oz. 15c, ½ lb. 45c, 1 lb. \$1.40, 5 lbs. \$6.00, postpaid.

Ratekin's Message to You

DIVERSIFY YOUR CROPS

Grow Forage Fodder and Ensilage Plants

FORAGE CROPS is a subject that I have preached in our Seed Book, and whenever I had a chance for the past fifteen years I have practiced what I have preached. I have raised Millet, Cane, Kaffir Corn and other crops each year. I know they are profitable. Thousands of up-to-date money making farmers grow profitable crops of forage plants each year. Many more should do so, they all help out on a shortage, or to fill in, in making alteration in the rotation of changing feed for your stock.

There are several plants that are practically drought resisting and will produce a fair crop with very little or any moisture. These crops are indispensable to the countries that are affected more or less with drought and can be used to good advantage in every location in the United States. The farmer who is wide awake, will not depend upon one thing alone but will diversify crops, so whenever one thing is a failure, he can fall back on others, and forage plants are one of the best things there is to fall back on, as they can be sown till very late in the season and yet produce very satisfactory results.

Land that has been over-flown, or that is wet, or some misfortune has caused a failure of stand, can still put in some kind of a forage crop and know you are sure of getting good results. You can sow forage plants such as Cane, Kaffir Corn and Milo Maize, on very thin soil and are reasonably sure of obtaining a fair crop. You can sow some of these forage crops as late as August and the majority of the seasons harvest a good crop. You can follow early crops, such as fall wheat, rye, barley, early oats, etc., then plow the ground, drill or sow broadcast, Cane or Kaffir Corn, Millet, Rape, Turnips, etc., and they can be grown with great success after these crops have been removed. I want to say to you personally, if you have not raised forage crops, you are missing a whole lot of profit, and I would certainly advise you to do so. We have a nice line of the best seeds, that are carefully selected and guaranteed to be of high germination which cannot help but produce satisfactory returns.

A Page of Forage, Ensilage and Pasture Crops it Pays to Plant

ALFALFA—King of All Crops

The Supreme Leader of All the Clovers

No crop ever grown has had such a conspicuous place in increasing the profit from agriculture as alfalfa. The U. S. Dept. of Agriculture is authority for the statement that alfalfa at two years adds \$100 to the value of every acre on which it grows. **PRICE**—1 lb postpaid 35c, 3 lbs \$1.00. By freight or express, peck \$3.25, bu \$12.00, ½ bu at bushel price.

CANE or SORGHUM—Early Amber

A valuable sorghum for sugar or fodder. It will bear pasturing when young, and is thoroughly adapted to the requirements of dairymen. The seed is valuable for stock and poultry. **PRICE**—Pkt 10c, pound 25c, 3 pounds 65c, postpaid. By express or freight, not prepaid, peck 60c, bushel (50 lbs) \$2.00.

Early Orange Cane

The favorite Southern variety. It yields an abundance of syrup. It does not grow as tall as Early Amber, but is heavier. **PRICE**—Pkt 10c, pound 25c, 3 pounds 65c, postpaid. By express or freight, not prepaid, peck 60c, bushel (50 lbs) \$2.00.

Teosinte

This strong growing annual grass is a native of Central America, and does not mature its seeds at the North. It grows from 8 to 12 feet high and somewhat resembles Indian Corn. It has the habit of tillering or stooling at the root, probably produces more forage than any other known plant. It is liked by stock. The stalks are tender and there is no waste. Cultivate the same as Corn, use 3 lbs of seed per acre. **PRICE**—Pkt 10c, ounce 15c, ¼ lb 30c, lb \$1.00, postpaid.

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 4 to 5 pounds per acre. **PRICE**—Pkt 10c, lb 25c, 3 lbs 65c, postpaid. By express or freight, not prepaid, peck 60c, bushel (56 lbs) \$2.25.

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 to 5 pounds of seed per acre. **PRICE**—Pkt 10c, lb 25c, 3 lbs 65c, postpaid. By express or freight, not prepaid, peck 75c, bushel (56 lbs) \$3.00.

White Kaffir Corn

A valuable non-saccharine sorghum, producing 2 to 4 heads per stalk. In the South it will yield a full crop of grain (50 to 60 bushels) and two crops of fodder, as it shoots up after cutting. It withstands drought well. Stalks make excellent fodder, the grains fine poultry and stock food, also splendid flour. Use 4 to 5 pounds of seed per acre. **PRICE**—Pkt 10c, lb 25c, 3 lbs 65c, postpaid. By express or freight, not prepaid, peck 60c, bushel (56 lbs) \$2.00.

Billion Dollar Grass

A QUICK PRODUCER. 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 (according to the richness of the soil) from 5 to 7½ feet. It is preeminently the grass to sow if you are going to be short on hay for your stock. It is truly the most marvelous grower, the most luxuriant stooler we have ever seen. Imagine a field sown to Billion Dollar Grass, with every spear of it over six feet tall, yielding from 26,000 to 50,000 pounds of as rich, green fodder as the world has ever seen. Hard times must vanish on every farm where Billion Dollar Grass is sown. Horses, mules and the like jump over a four-foot fence to get at Billion Dollar Grass, and they will fatten and keep healthy thereon. They will eat the hay eagerly. **PRICE OF BILLION DOLLAR GRASS**—Package 10c, lb 25c, postpaid. By freight 12 lbs \$1.00, 20 lbs \$1.40, 50 lbs \$3.00, 100 lbs \$5.50, 250 lbs \$12.50.

German or Golden Millet

German Millet is a fine crop for both soiling and hay, for the latter purpose it must be cut just as it begins to head before blooming. It is ready for use in 60 or 65 days after sowing. When used at the proper stage of development it is one of the most valuable of soiling plants. Sow a bushel per acre for hay. **PRICE**—Pound 25c, 3 lbs 65c, postpaid. By express or freight, not prepaid, peck 60c, bushel (43 lbs) \$2.00.

Annual Hog Pasture Mixture

We most earnestly urge upon farmers all over the United States the real importance to them of using this Annual Hog Pasture Mixture of ours. It is called Annual Hog Pasture Mixture because when we commenced selling it years ago it was intended primarily to supply pasture for swine. It has, however, proved of such great economic value, not only for swine but all other live stock, that its use is increasing at a rate that is truly amazing even to us who know how valuable it is. It is made from 14 different grains and forage plants, many of which grow again as fast as fed down. Now that grain is so high in price, it is essential that stock be given a nutritious feed in variety so as to cut down the expense of feeding. Annual Hog Pasture Mixture is just the thing for this purpose. We wish we could get every stock raiser to try at least an acre of our Annual Hog Pasture Mixture this coming season. Many of those who have used it in the past are now ordering it in lots of 1000 pounds. They find they cannot get along without it. The quantity of Annual Hog Pasture Mixture required varies according to conditions of soil and climate, but as a rule we recommend sowing 100 pounds to the acre. The ground should be thoroughly prepared as early in the spring as possible so as to give the mixture an early start. **PRICE**—\$4.00 a hundred pounds. In 500 lb lots \$3.75 a hundred pounds. Sacks free. (Five cents a pound in less than 100 pound lots.)

Dwarf Essex Rape

The Best Green Forage Plant for Sheep and Hogs that is Known

Every farmer should plant Rape, for it is the cheapest feed you can grow. We have made our price on Rape seed very low. It will only cost about 40c per acre to sow the best seed, and we know of no better way to produce so much green feed at so small a cost. Don't fail to start raising rape. **PRICE**—One lb postpaid 25c, 4 lbs prepaid 75c, 10 lbs prepaid \$1.75. By freight or express, your expense, 4 lbs or more 10c per lb, 10 lbs or more 8c per lb, 15 lbs for \$1.00, 100 lbs or more 6½c per lb, 200 lbs or more 6c per lb. Bags free.

The Wonderful Sand or Hairy Vetch

As a Pasture Plant for Late Fall and Early Spring is Without an Equal

Vetch is beyond doubt one of the most valuable fodder plants, for owing to its adaptability to withstand severe drought, heat and cold. Individual plants will make a ten foot growth before going to seed. It is an annual, but drops its seeds freely, and will come up year after year on the same ground. The Washington Department of Agriculture estimates the value of an acre of Vetch plowed under equivalent to putting into the ground \$20 to \$45 worth of commercial fertilizer. Make sowings in early spring at the rate of 40 lbs per acre, broadcast, with the addition of ½ bu Rye or Barley to furnish support for the vines. On good, rich soil it yields crops of green fodder, running from 10 to 15 tons to the acre, equal to 3 to 4 tons when cured as dry hay. Vetch is no experiment, it is a great forage plant, it will add dollars to your income, it will build up your farm and make you money. **PRICE**—Postpaid, lb 25c, 3 lbs 65c. By freight, your expense, 30 lbs \$1.50, 25 lbs \$3.50, 50 lbs \$6.50, 100 lbs \$12.00.

Spring Rye

Used with profit as a catch crop where grain has winter killed. Quite commonly employed within recent years. Sow 1½ to 2 bushels to the acre. **PRICE**—Pkt 10c, lb 25c, 3 lbs 65c, postpaid. By express or freight, not prepaid, peck 50c, bu \$1.60.

Canada Fife Spring Wheat

Widely recognized as the most desirable spring wheat in cultivation. It is not excelled for earliness, vigor and yield. Sow 1½ bu per acre. **PRICE**—Pkt 10c, lb 25c, 3 lbs 65c, postpaid. By express or freight, not prepaid, peck 60c, bushel \$2.00.

Value of Sweet Clover

Careful analysis by experiment stations of Sweet Clover hay has proven it contains as high a per cent. of protein as alfalfa. In many respects it has great advantages over "King Alfalfa," as it will thrive on the poorest, thinnest old worn out or sandy soil where almost no other crop will succeed. It is the greatest nitrogen gathering plant known. It is a luxuriant vigorous grower from the start. It produces three to six tons of best hay to the acre—is an excellent pasture plant. It will add 50 per cent. to the value of good soil and 100 per cent. to old worn out or hill land. It's a success everywhere from Maine to California and from Man to toba to the Gulf of Mexico. **TRY SWEET CLOVER.** **PRICE**—Postpaid, White Blossom, fancy cleaned, 1 lb 35c. By freight, your expense, 10 lbs 25c per lb, ½ bu \$5.50, 1 bu \$12.00. Yellow Blossom, 1 lb postpaid 35c. By freight, your expense, 10 lbs 22c per lb, ½ bu \$5.50, 1 bu \$10.50. Unhulled Seed, White Blossom, ½ bu \$5.25, 1 bu \$10.00.

Return to _____

Please write name and address on lines above.

Ratekin
Seed House
Shenandoah,
Iowa, U.S.A.

RATEKIN'S CHOICE COLLECTIONS OF HARDY FRUITS

Ratekin's Big Bargain Offer

Here is your chance to buy your trees right

HERE THEY ARE!	20 Apple Trees	4 to 5 feet high	88 PLANTS, ALL FOR \$10.00
	5 Pear Trees	4 to 5 feet high	
	6 Grape Vines	2 years old	
	5 Plum Trees	3 to 4 feet high	
	10 Peach Trees	3 to 4 feet high	
	6 Currant Bushes	2 years old	
	6 Raspberry Bushes	Extra Strong Tops	
	5 Pie Plants	Extra Good Plants	
	25 Asparagus	Makes nice crisp growth	

ORDER this collection now. Pin a \$10 Postoffice Order, Express Order or Check to this sheet and mail it to us today. These plants are absolutely good, strong, sturdy boys, A No. 1 in every respect and don't forget that my price of \$10 for this wonderful collection of 88 plants is absolutely cost price to us. We want your business, of course, but first of all we want to show you that we have the goods, therefore we are making you this great, big bargain offer. **ORDER IT NOW.**

HERE ARE THE VARIETIES

Apple.....	{	5 Northwestern Greenings	{	3 Cherry
		5 Ben Davis		3 Fay's Prolific
		5 Duchess of Oldenburg		3 Cumberland
		5 Wealthy		3 Kansas Black
Pears.....	{	3 Keiffer	Currants....	{
		2 Duchess		
Grapes.....	{	3 Concord	Raspberries. {	3
		3 Niagara		
Plums.....	{	2 Abundance	Pie Plant.....	5 Plants
		3 Burbank		
Peaches.....	{	5 Alberta	Asparagus....	25 Plants
		5 Bokara		

COLLECTION No. 1

200 Select Strawberry Plants for \$1.50 postpaid or
\$1.25 by express

25 Baldwin's Pride of Michigan	50 Myer's Seedling
25 Bederwood	50 Senator Dunlap
25 Clyde	25 Glen Mary

COLLECTION No. 2

51 Small Fruits sent you by express for

\$2.00

12 Currant, Red Cross	12 Raspberry, Loudon
6 Gooseberry, Industry	6 Grape, Concord
12 Raspberry, Gregg	3 Dewberry, Lucretia

ALL selected stock 2 yr., No. 1

COLLECTION No. 3

12 Choice Novelties by express for

\$1.00

1 Highbush Cranberry	2 Improved Juneberry
1 Buffalo Berry	1 Loganberry
6 Strawberry Raspberry	1 Dewberry, Austin's Improved

SPECIAL

COLLECTION No. 4

12 Apple Trees

selected 2 yr. old No. 1

Your choice of any variety listed in Catalog for

\$2.50

Six at dozen rate.

ADDRESS **THE RATEKIN NURSERY COMPANY**

SHENANDOAH, IOWA

LOCK BOX No. 126,

WRITE FOR OUR COMPLETE ILLUSTRATED NURSERY CATALOG. ITS FREE FOR THE ASKING.

RATEKIN'S NEW MAJESTIC

RATEKIN'S SEED HOUSE

SHENANDOAH, IOWA

FEISTER-GUTHRIE-ROLLS-NEWBOLD