Historic, Archive Document

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

62.79

LIBRARY
RECEIVED
JUN 10 1920
D. H. G. RICH

WHEELER'S SEED BOOK

FOR
1912

1912

Dakota Improved Seed Co.
MITCHELL, SOUTH DAKOTA.

Wheeler's Model Garden Collection

Regular Value

\$2.00

Special Price

\$1.00

30 VARIETIES A COMPLETE HOME GARDEN FOR \$1
\$2 WORTH OF GUARANTEED SEEDS

THIS collection is sufficient to plant one-tenth of an acre. It will furnish vegetables from January to December. The kinds included are the ones needed in every garden. They have been selected with the greatest care and every packet is marked to show germination test. None better can be secured anywhere at any price. We are able to make this offer at this special reduced price only by making up a large number of collections at one time so do not request any changes. In ordering, simply specify "Wheeler's Model Garden Collection." Don't ask for extras, discounts or premiums on this collection for we cannot allow them at this price.

SENT PREPAID TO ANY ADDRESS IN THE U. S.

1/2 pint Beans, One of the best wax-podded bush varieties..\$.10	1 pkt. Parsnip, Hollow Crown or Improved Guernsey05
1 pkt. Beet, Crimson Globe or Crosby's Egyptian05	1/2 pint Peas, One of the best early varieties15
1 pkt. Cabbage Eureka, Early Jersey Wakefield or Charleston Wakefield05	1 pkt. Pepper, Ruby King or Bull Nose05
1 pkt. Cabbage, Danish Ball Head or Hollander05	1 pkt. Pumpkin, Small Sugar or Pie05
1 pkt. Carrot, Oxheart or Chantenay05	1 pkt. Radish, Rosy Gem or French Breakfast05
1 pkt. Celery, Golden Self-Blanching or White Plume..... .05	1 pkt. Radish, White Icicle05
1/2 pint Sweet Corn, Golden Bantam10	1 pkt. Rutabaga, Purple Top Yellow05
1 pkt. Cucumber, Improved Early White Spin..... .05	1 pkt. Squash, Improved Hubbard or Golden Hubbard05
1 pkt. Lettuce, California Cream Butter05	1 pkt. Tomato, Thornber or Early June15
1 pkt. Lettuce, Prizehead or Morse05	1 pkt. Tomato, Yakima or Dakota Farmer10
1 pkt. Muskmelon, Rocky Ford or Burrell's Gem05	1 pkt. Turnip, Purple Top Strap Leaf05
1 pkt. Watermelon, Fordhook Early or Kleckley's Sweet .. .05	1 pkt. Four O'Clock, Mixed Colors05
1 pkt. Onion, Large Red Globe or Large Red Wethersfield..... .05	1 pkt. Nasturtium, Diamond Dwarf Mixed05
1 pkt. Onion, Prizetaker or Yellow Globe Danvers..... .05	1 pkt. Pansy, Diamond Mixture... .10
1 pkt. Parsley, Extra Moss Curled05	1 pkt. Portulaca, Mixed Colors... .05
	1 oz. Sweet Peas, Diamond Mixed10
	\$2.00

PLACE YOUR ORDER EARLY

DAKOTA IMPROVED SEED CO.

MITCHELL, SOUTH DAKOTA

Mr. Hill has always been deeply interested in agriculture and for the past 25 years

has been a resident of South Dakota. During this time he has lived in Alexandria and was engaged in the implement business for many years. For the past three years he has been cashier of the Farmer's Bank of Alexandria and is now vice-president of that institution. For six years Mr. Hill has been a member of the State Board of Agriculture of which he is now president, and has had charge of the live stock department of our State Fair. He has been a prominent breeder of Red Polled cattle for more than 12

W. S. HILL, President

years and now has the most successful prize-winning herd of this breed anywhere in the country. He is treasurer of the Red Polled Cattle Club of America and proprietor of the Riverview Ranch, famous for its thorough-bred Red Polled cattle, Berkshire hogs and improved varieties of corn and alfalfa. His experience and knowledge of agricultural affairs are doing much to make the Dakota Improved Seed Co. a more effective organization. Mr. Hill's farm, comprising 1360 acres of choice land, is being used in connection with the business of the Dakota Improved Seed Co., for experimental and other purposes.

Mr. Wheeler is a man who, speaking figuratively, has lived and breathed agricultural atmosphere all his life. His extensive schooling, wide experience and practical training in all agricultural lines fit him pre-eminently for the management of a seed business.

Born at Stockton, Minnesota, of New England parents, he removed early in life to Winona, where he completed his common school education. In 1894 he graduated from a 3 years course in the School of Agriculture, University of Minnesota. After 2 years of teaching district school he entered the College of Agriculture, University of Minnesota, obtaining his degree, Bachelor of Agriculture, in 1900. The year following was devoted to graduate study at the same University ending with the degree M. S.

At various times during his college career and the years immediately following he held the following positions: Student assistant in Horticulture, Student assistant in Forestry, Undergraduate instructor in Botany, and Instructor in Botany in the University of Minnesota; Professor of Botany and Entomology and Botanist of Experiment Station, South Dakota Agricultural College.

In addition to the regular work of the positions above named he found time for much other work along the lines of agricultural research and experiment. In 1898-1902 he was in charge of University of Minnesota Herbarium and increased the Herbarium from 150,000 to 300,000 specimens. The summers of 1899 and 1900 were devoted to Minnesota Botanical Survey Field work. His next work was a special botanical investigation of the grass twine industry in Minnesota in 1902. In 1904-07 he co-operated with the U. S. Department of Agriculture in hardy alfalfa investigations at Highmore, S. D. In 1904-5-6 he lectured in more than 75 towns of South Dakota and portions of North Dakota, Minnesota and Iowa on special seed trains.

Mr. Wheeler holds memberships in a great many agricultural societies and associations, has written and published books along these lines and is a regular contributor to the columns of the Dakota Farmer and furnishes occasional contributions to other agricultural and botanical journals.

The above facts are cited here for the purpose of showing you why Mr. Wheeler is an authority on seeds and plants and why his advice on agricultural subjects which is free to all who ask for it, is invaluable to farmers of the Northwest. His whole life has been devoted to study, experimenting and improving varieties of plants that will best meet the climatic and soil conditions of this territory.

Would you not rather buy your seeds from a firm that has the best knowledge, the science and the skill to produce the very best?

Read the various letters from satisfied customers, scattered throughout this book, and we believe you will agree with them that the Dakota Improved Seed Co. is, above all others, best fitted to supply your needs.

OUR GUARANTEE

"We Guarantee the Seeds we sell to be as represented by us in that we replace any seeds or refund the money on any seeds sold by us that prove to be otherwise."

A guarantee to be of any service must in the first place have a clear well-defined meaning and in the second place must be made to be of use. There are certain things that are reasonable and there are others that are not reasonable.

This guarantee is a contract, between the seller and the buyer. It is valid and good and protects both parties insofar as both parties carry out their part of the contract.

In order to illustrate just what this guarantee means and how it can and should be used to protect you, let us cite some particular cases.

Case I. A man bought 5 bushels of ear-tested corn at \$5.00 per bushel guaranteed

96 per cent germination. He planted this and got only half a stand and came back for his money. He brought back a little of the seed and we sent it to the State College for test and they reported 98 per cent germination. We inquired of his neighbors and looked up his field because we wanted to determine why he got only half a stand. We found that he only plowed a few inches deep, hardly turning the stubble and that the corn sprouted but dried up in the poorly prepared seed-bed. We didn't refund a cent to him because he wasn't entitled to any.

W. A. WHEELER,
Secretary and Manager

Case II. At one time we had a small lot of Corn Palace No. 13 corn in our warehouse which showed a germination in our test of over 90 per cent. This was sent out to 5 or 6 customers. We had a complaint from two of these on the germination. We got some corn back and tested it and the per cent was low. We immediately wrote to the other three or four who had that corn and asked them to make a test and report to us. They did so and the result was a low test in every case. We voluntarily refunded to every one who had received this corn for we had what we considered good and sufficient evidence that the corn was off and that the customers were entitled to a refund. We cannot explain why our first tests were high and the later ones low. We simply know that there must have been some error somewhere.

WHEN WE REFUND AND WHEN WE DO NOT

The above are simply two cases to illustrate when we refund and when we do not. When we have proof or reasonable evidence that the fault lies in the seed or is due to any negligence on the part of our employees we make the refund. In a few cases we have not carefully investigated to get evidence before making a refund but we always assume the right to make a thorough and careful investigation.

In any contract the responsibility of carrying out the conditions of the contract are divided between the two parties. In buying and selling seeds under a guaranty both parties must be held for their share of the contract. A guarantee or contract should protect both the buyer and the seller and it will do this if each does his part. For example: We sell you seed upon which we have made both purity and germination tests and these are both good. We ship you the seed and if you plant it immediately without saving sample for purity or germination test you have covered up your only evidence of the quality of the seed that you received. Many things can happen to seed after it is sown that are not the fault of the seed or the seedman. For another example let us cite an extreme case. You order some barley and it happens through an error in marking bags at our warehouse that you are sent wheat instead of barley. You plant this without looking at it and then later come back for a refund because of the error. This could not be collected for you had an opportunity to examine the seed before sowing. You could easily distinguish wheat from barley and could then have had the mistake adjusted at our expense before any harm had been done. In this latter case you did not assume your share of the responsibility of correcting the error made by us.

In making this guarantee and in selling guaranteed seeds we are going outside of established customs. Nearly all seedsmen make no guarantee whatever but publish what is known as the "Seedsmen's Disclaimer" which reads as follows:

The Guarantee (?) of the Ordinary Seedsmen.

"We give no warranty express or implied as to purity, description, quality, productiveness or any other matter of any Seeds, Bulbs or Plants we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned."

Please compare this with our guarantee and see which you would rather buy your seeds under. It sums down to this: Do you wish to be protected or do you wish to assume the entire responsibility of seeds after they leave the seedsmen's hand. This matter rests entirely with you and it is worth considering.

PLEASE REMEMBER

We do everything in our power to see that the seeds we send out are right and assume a financial responsibility to the amount paid us for the seed purchased.

We cannot guarantee a crop from our seeds for there are so many factors which go to influence a crop which are entirely beyond our control and we cannot conduct a crop insurance business.

Complaints, if any, should be made as soon as the fact on which complaint is made can be determined. If this is done and the fault lies in shipping or in an accidental mixture of seeds or anything else of this kind it may be possible for us to remedy it before any harm is done.

PLEASE READ BEFORE ORDERING

WRITE plainly your name, postoffice, county and state on each and every order sent us. If shipment is to be by freight, be sure to state whether the railway station is the same as your postoffice or not.

Order early. A great many delays and other troubles can be avoided by ordering early and we will consider it an accommodation if you will do this.

Postage or Express Prepaid. Always state manner you wish your order sent, whether by mail, express or freight. In considering our prices please bear in mind that we prepay the postage or express on seeds listed by the packet, ounce, fraction of an ounce, pint, third-pint, pound, fourth-pound or quart, unless otherwise stated. Seeds go by mail or express at the special prepaid rate of eight cents per pound. The smallest charge by express is ten cents. If you are located near an express office and your shipment weighs 20 ounces or more it is better to ship by express as it is safer.

Premium. On any order for seeds priced per packet, ounce, fraction of an ounce or third-pint to the amount of \$1.00 or more we allow a premium of 25 cents worth of seeds for each \$1.00 sent with order. This means that for every \$1.00 sent for such seed, \$1.25 worth of seed may be selected. This premium will not be allowed on seeds not included under these specifications. No discount or premium will be allowed on Model Garden Collections.

Cash must accompany order and should be in the form of money order, bank draft or as currency in a registered letter. Stamps will be accepted for amounts under one dollar.

Samples. We furnish samples of our farm seeds to prospective buyers on request. These are all sent free except with ear corn on which a charge of ten cents per ear is made to cover cost of mailing. Samples of corn shelled and graded are sent free.

Delays in Shipment. If we cannot send your order the same day that it is received we will mail you a card stating that we have received your order and we state the amount of money enclosed and the number of the order. If this notice or the seeds themselves do not reach you in reasonable season write to us without delay so that we can look the matter up. If your order can be filled within a few days this is all the notice we give. If for some reason shipment on a part or all of your order is unavoidably delayed, we will give you notice. It sometimes happens that we are out of stock or our stock may not be cleaned ready for shipment or there may be other reasons. Write to us if your order does not arrive in due season.

FREIGHT RATES FROM MITCHELL, S. D., IN EFFECT JAN. 1, 1911.

Given in Cents Per 100 lbs., Less Than Car Lots.

Garden seeds, grass and clover seeds and potatoes go as third class; grain and corn as fourth class. We have been informed by the Railroad companies that the one-half rate on seeds that has been in effect heretofore has been cancelled. A special seed rate is in force on certain grains to points in North and South Dakota west of the Missouri river.

		3rd	4th			3rd	4th			3rd	4th
Salem	S. D.	.16	.12	Yankton	S. D.	.22	.17	Lincoln	Neb.	.55	.45
Sioux Falls	"	.21	.16	Elk Point	"	.27	.20	Omaha	"	.46	.35
Woonsocket	"	.15	.11	Bridgewater	"	.15	.12	O'Neill	"	.74	.59
Wolsey	"	.18	.14	Canton	"	.21	.16	Terry	Mont.	.97	.72
Redfield	"	.22	.18	Flandreau	"	.27	.20	Miles City	"	1.04	.79
Aberdeen	"	.27	.21	Howard	"	.20	.16	Musselshell	"	1.28	1.05
Bowdle	"	.36	.27	Bradley	"	.34	.26	Lewiston	"	1.47	1.26
Mobridge	"	.40	.30	Andover	"	.32	.24	Butte	"	1.58	1.35
Orient	"	.38	.28	Milbank	"	.41	.30	Billings	"	1.32	1.11
McLaughlin	"	.54	.46	Watertown	"	.34	.26	LeMars	Iowa	.30	.23
Lemmon	"	.65	.51	Faulton	"	.34	.26	Eagle Grove	"	.51	.33
Plankinton	"	.14	.10	Gettysburg	"	.39	.29	Sanborn	"	.35	.27
Chamberlain	"	.20	.16	Hettinger,	N. D.	.72	.55	Rock Valley	"	.27	.21
Kennebec	"	.32	.28	Linton	"	.53	.41	Manilla	"	.46	.34
Murdo	"	.49	.42	Edgeley	"	.47	.36	Charles City	"	.43	.37
Belvidere	"	.57	.49	Oakes	"	.52	.40	Cedar Rapids	"	.57	.45
Rapid City	"	.73	.64	Fargo	"	.68	.52	Des Moines	"	.52	.40
DeSmet	"	.24	.18	Grand Forks	"	.94	.72	Sioux City	"	.30	.22
Huron	"	.24	.18	Wahpeton	"	.61	.47	Chicago	Ill.	.67	.47
Miller	"	.30	.22	Jamestown	"	.96	.74	St. Louis	Mo.	.71	.52
Pierre	"	.39	.29	Minot	"	1.12	.92	Buffalo	N. Y.	.97	.68
Philip	"	.75	.67	Worthington,	Minn	.30	.25	Dallas	Tex.	1.51	1.21
Underwood	"	.90	.70	Winona	"	.43	.37	Denver	Col.	1.10	.87
Belle Fourche	"	.97	.81	Minneapolis	"	.43	.37	Casper	Wyo.	1.60	1.33
Buffalo Gap	"	.96	.79	Duluth	"	.64	.47	Leavenworth	Kan.	.64	.47
Dallas	"	.82	.65	Marshall	"	.43	.37	Milwaukee	Wis.	.67	.47
Tripp	"	.16	.12	Crookston	"	.82	.66	La Crosse	"	.43	.37
Armour	"	.18	.14	Fergus Falls	"	.74	.58	Seattle	Wash.	2.20	1.90
Tyndall	"	.20	.15	St. Cloud	"	.59	.49	San Francisco,	Cal.	2.20	1.90
Platte	"	.27	.21	Fremont	Neb.	.60	.49	Ogden	Utah	1.83	1.50

ORDER SHEET FOR *Field Seeds*

Dakota Improved Seed Company
Mitchell, South Dakota

WRITE PLAINLY

Name

Post Office

R. D., P. O. Box, or St. No.

County State

Date

Shipping Point

R. R. EXPRESS FREIGHT

Check in space after manner of shipment

STATE AMOUNT ENCLOSED

Draft, . . .

Money Order, .

Currency, . .

Stamps, . . .

Total, . . .

PLEASE DO NOT USE THIS SPACE

No.

Filled by	Date	Checked	How Shipped
--------------	------	---------	----------------

Use this Sheet for Field Seed, Machinery, Tools, Poultry Supplies, etc.

Bus.	Lbs.	CRO	VARIETY		
		Alfalfa			
		Alfalfa			
		Corn			
		Corn			
		Wheat			
		Oats			
		Barley			
		Flax			
		Spelts			
		Field Peas			
		Millet			
		Rape			
		Sorghum			
		Buckwheat			

Amount Forward

KEEP A COPY OF THIS ORDER

CUT OFF ON THIS LINE

Buy only "Diamond Brand" Grass, Clover and Alfalfa Seeds; they are right in every respect. None better at any price. ∴ ∴

REMARKS

Use the following lines for remarks or instructions regarding This Order Only.
Use separate sheet for any other subject.

OUR GUARANTEE

OUR GUARANTEE

Our Guarantee: We guarantee the seeds we sell to be as represented by us in that we will replace any seeds or refund the money on any seeds sold by us that prove to be otherwise.

FREE

With every order for grass, clover or alfalfa seeds at catalog prices to the amount of \$25.00 or over we will send an Improved Cyclone Seeder free upon request. Only one will be sent as a premium to any one customer however order. It will not be sent unless you ask for it.

ORDER SHEET FOR **Garden Seeds**

Dakota Improved Seed Company
Mitchell, South Dakota.

WRITE PLAINLY

Name

Post Office

R. D., P. O. Box, or St. No.

County State

Date

Express Office

Ship by **MAIL** **EXPRESS** **FREIGHT**

Check in space after manner of shipment.

STATE AMOUNT ENCLOSED

Draft, . . .

Money Order, .

Currency, . .

Stamps, . . .

Total, . .

PLEASE DO NOT USE THIS SPACE

No.

Filled by	Date	Checked	How Shipped
--------------	------	---------	----------------

WE PREPAY CARRYING CHARGES ON ALL ORDERS LISTED AT POSTPAID PRICES.
ALL ORDERS LISTED AT EXPRESS OR FREIGHT PRICES SENT CHARGES COLLECT

Use This Sheet For Garden Seeds ONLY

QUANTITY

SEEDS OR OTHER ARTICLES WANTED

AMOUNT FORWARD

READ PREMIUM REGULATIONS ON OTHER SIDE

Don't Forget the "BIG 4" TOMATOES

[illegible]

REMARKS

Use the following lines for remarks or instructions regarding THIS Order only.
Use a separate sheet for any other Subject

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or printed text on the page.

KEEP A COPY OF THIS ORDER

PREMIUM

Of 25 cents worth of Seeds extra on each \$1.00 sent with order.

Does NOT apply on Wheeler's Model Garden Collection
Does NOT apply on Bulk Seeds
DOES apply on all orders of Pkts., Ounce, Fraction of an Ounce, and one-third Pint.

PRIZE CUPS OFFERED BY THE

Dakota Improved Seed Co.

Grand Sweepstakes Corn Trophy

offered by the

Dakota Improved Seed Co.

for the highest scoring ten ears of corn exhibited at the South Dakota Corn and Grain Show, Mitchell, S. D.

This trophy was first offered at the 1911 corn show and was won by Mr. John P. Thompson, Elk Point, S. D. The same ten ears that won this cup were also exhibited at the National Corn Exposition, Columbus, Ohio in February, 1911 and won the sweepstakes for the Northern Zone. This cup must be won two years by the same exhibitor to become his permanent property.

PRIZES FOR THE BOYS

Prize Cup for Winner in State Corn Contest,

We believe in encouraging the boys to greater agricultural efforts and in order to further the interest in corn growing contests conducted by the Superintendents of county schools we offer a beautiful silver cup like the one shown in lower right hand corner of this page to the boy exhibiting the best 10 ears of corn.

The large cup shown at left goes to the winner of the boys contest at the State Corn Show. The boys who win the smaller cups in each county will compete for this large trophy. The State Corn Show Trophy for boys is a magnificent silver cup 22 inches high and beautifully engraved in corn.

Prize Cup for Winner of each County contest

GET YOUR BOYS INTERESTED

FREE

THIS VALUABLE BOOK FOR EVERYBODY WHO RAISES ALFALFA

WE want this book to go into the hands of every farmer in the Northwest. Our Mr. Wheeler has made a most careful study of this crop in the Dakotas and has given in this book the boiled-down results of his years of observation, experiment and experience with this crop.

In this book you do not have to read a hundred pages to find what you want. Every feature is covered and expresses "right to the point" what you want to know about alfalfa. Some of the most important sections of the book are those treating on:—Alfalfa as a Dry-land Crop; Selecting a Location for Alfalfa; Preparation of the Seed-bed; Time and Rate of Seeding; Harvesting for Hay or Seed; Hardiness and Hardy Varieties. There are many other subjects covered but the one on hardy varieties alone is worth many dollars to any farmer intending to sow alfalfa in the Northwest.

This is the second edition of this book, greatly enlarged and improved. The first edition was so highly appreciated and so widely demanded by our friends and customers that we determined to put out a larger edition in much more substantial form. This is the book we now offer you absolutely free.

The new edition contains 64 pages, 5x7 inches in size printed on good quality paper in clear readable type, is profusely illustrated with fine half-tone pictures, and is substantially bound in heavy Buckeye covers. If put on the market in the regular way a book like this would bring not a cent less than Half a dollar, but we now offer it to you absolutely free.

HOW YOU CAN GET THIS BOOK FREE

To anyone who purchases alfalfa seed of us this season and requests the book, or to anyone interested in alfalfa who will send us the names and addresses of three others who are interested in alfalfa or who ought to be interested in the most valuable crop for the Northwest, we will send a copy of our alfalfa book, absolutely free, postpaid.

If you desire a copy of this book—and you ought to have it—write us at once. The first edition went so rapidly that some who wanted the book were necessarily disappointed, so don't delay.

Mail us your order for alfalfa seed or send us the names of three friends—now—and get the book free.

Don't lose your hay crop again by drouth. Plant 20 acres of alfalfa to each quarter section. This will make you more money whether the season be wet or dry than all the rest of the farm put together unless that is in alfalfa too.

One severe winters test of alfalfa will tell you more about hardiness than a dozen ordinary or mild winters. The Baltic and Wheeler's Acclimatized Turkestan have stood such tests.

I think this country is only fit for early varieties of corn. Your seeds are the best seeds I have had since I have been in Dakota and they seem to be all you claim them to be.

Mrs. C. T. Martin, Draper, S. D.

If you ever needed a guarantee on seed corn this is the year you need it. Last year about 70 per cent of the corn would grow while this year not over two per cent is fit for planting and only a small portion of this is really choice seed corn.

Our Specialty *Alfalfa*

A BIG MONEY-MAKER FOR THE FARMER.

Every farmer in North and South Dakota or any of the adjoining territory should have a field of alfalfa and cannot afford to be without it. There is more money in alfalfa and corn for live stock than in any other single crop or combination of crops in the Northwest. Before planting your crop of alfalfa write for a copy of our FREE alfalfa book. See description on opposite page.

SOW ONLY HARDY ALFALFA.

Alfalfa is coming to be grown in nearly all parts of the Northwest as one of our important farm crops, but the question of hardiness has not been as fully considered as its importance warrants. In the most southern localities it has not been necessary to consider hardiness because the stocks were not killed out by winter-killing and good returns were received from most of the seed that was sown. In the north, however, the conditions are entirely different. We have regions where the thermometer goes very low and where there is a limited amount of snow-fall to protect the fields during the winter. In such places it is necessary, in order to secure the best results, that hardy stocks be used.

The manager has been working since 1904 in the breeding of alfalfa for Dakota and northern conditions. Considering the length of time this work has been carried on, the progress has been very marked. This work was carried on at the Brookings Experiment Station and at the Highmore Experiment Station from 1904 to 1906. During 1907, 1908, 1909 and 1910 it has been conducted on the farm of the Dakota Improved Seed Company at Mitchell.

IMPORTANCE OF CLEAN SEED.

Noxious weeds are a curse to any crop and alfalfa is no exception. The value of sowing clean seed is not appreciated by farmers to the extent it should be. Among the commonest weeds in alfalfa are green foxtail or pigeon grass, Russian thistle and dodder. The first two, namely foxtail and Russian thistle, are not particularly noxious but the more we can do to keep them out the better it will be. The last, the dodder, should be strictly avoided and it is up to the grower to steer clear of this pest. If one buys seed containing either of them he must remember that he is paying a high price for the weed seed present which space should be occupied by alfalfa seed.

DIAMOND BRAND TRADE MARK

OUR SUPERIOR PROCESS OF CLEANING.

We installed last year at great expense one of the best cleaning outfits for the cleaning of alfalfa and clover seed in the Northwest. Heretofore we have been forced to apologize for the presence of foxtail in some of our alfalfa and clover seed because our regular cleaning machinery would not remove it. The equipment we have just installed has for its principal object the removal of this seed. A large percentage of Dakota grown alfalfa and clover contains foxtail and we are pleased to know that from now on it can be removed from the seed we offer for sale. Buy our "Diamond" brand and you will get seed that is right.

PRICES OF ALFALFA SEED.

Quality and price should be considered in making any purchase. In our Diamond brand alfalfa seed we have reached the acme of quality. None better can be secured. We guarantee "Diamond" Brand to be right in every respect.

Source, Quality and Variety	Mail or Express prepaid		Express or Freight Charges Paid by Receiver			
	Per lb.	4 lbs.	Per lb.	5 lbs.	20 lbs.	100 lbs.
Dakota Grown						
"Diamond" Brand	.45	1.40	.85	1.35	4.50	21.50
"Emerald"					4.10	19.50
"Opal"					3.75	18.00
Dakota Acclimatized "Diamond" Brand	.50	1.55	.40	1.50	5.50	25.00
Wheeler's Acclimatized Turkestan No. 1 and 2	.60	2.20	.50	2.25	8.00	37.50
Baltic or S. D. No. 167	.60	2.20	.50	2.25	8.00	35.00
Grimm or S. D. No. 162	.70		.60

ACCLIMATIZED DAKOTA ALFALFA

Our farm crops tend to adapt themselves to the conditions under which they are grown. This is known as acclimatization. Stocks of seeds that have become acclimatized to home conditions are always sought after. This is particularly the case with alfalfa in the northern states where hardness is an important factor. A stock of alfalfa that has stood the test of several severe winters when other stocks of alfalfa have winter-killed under the same conditions has "made good." Such stocks of alfalfa should be selected for seed. The longer the period of acclimatization and the more severe winters of survival, the harder the test and the better the seed for northern conditions. We are establishing the grade of **Acclimatized Dakota Alfalfa** to cover such stocks. Every stock of **Acclimatized Dakota Alfalfa** sold by us must have been grown in South Dakota north of the latitude of Mitchell or under equally severe conditions for at least ten years.

The Most Profitable Crop on a Dakota Farm.

\$1008.30 paid for a single wagon load of alfalfa seed. This load of 5931 lbs. was produced on 20 acres of land in 1911 with 13 inches of rainfall.

Martin's Acclimatized Dakota. We have on hand at the present time a fine stock of alfalfa seed grown by S. H. Martin of Whitewood, S. D. This alfalfa was sown by Mr. Martin on his farm about 12 miles northeast of Whitewood in 1887 and has grown there ever since without any apparent winter-killing. Mr. Martin has increased his acreage from year to year but has always with one exception used seed from the original field. All of Mr. Martin's alfalfa is grown without irrigation so this is strictly a dry land stock never having had irrigation during the twenty-four years it has been grown on this farm. We can heartily recommend this seed to Dakota farmers. For prices see page 11.

FREE BOOK ON ALFALFA.

A copy of "Alfalfa in the Northwest" by W. A. Wheeler will be sent free on request to anyone purchasing alfalfa seed from us this season. See description of book on page 10 of this catalog.

BROADCAST SEEDER AS PREMIUM.

To everyone purchasing grass, clover or alfalfa seed at catalog prices to the amount of \$25.00 or over we will send as premium on request with the shipment one Cyclone Broadcast Seeder. For description of seeder see page 73.

BALTIC OR S. D. No. 167 ALFALFA

The writer has been experimenting and working with the Baltic alfalfa for the past 8 years and has become more enthusiastic each year over the observations made and records obtained showing the general adaptation of this variety to all of our northwestern conditions.

Mr. W. F. Kelly of Renner, S. D., called the writer's attention to this alfalfa in 1904. After a single year's trial on the experiment plats at Brookings and Highmore I was so struck with its desirable characteristics and apparent hardness at both places that I made plans to make more thorough tests at other points in South Dakota and at the same time continue the work at both the Brookings and Highmore Experiment Stations. As soon as I could harvest a few pounds of seed I sent samples to most of the other experiment stations throughout the West and Northwest for trial. To date returns have come in from several of these stations and every report shows that

DRY LAND ALFALFA SEED.

See note at bottom of page.

The 6 strains referred to above include selections from the Baltic and Wheeler's Acclimatized Turkestan Nos. 1 and 2.

Records at the N. D. Experiment Stations, the Colorado Station and also at the U. S. Experiment Station at Belle Fourche all show the Baltic to rank as one of the best stocks tried.

The writer remained at the S. D. Experiment Station only 3 years after the trials of Baltic Alfalfa were started but has continued this work since coming to Mitchell. Every year's results bring new and favorable observations on the Baltic alfalfa.

SUPPLY OF SEED LIMITED

We have offered Baltic alfalfa seed for sale in small amounts for three years but this is the first year that we have had a sufficient quantity to offer it for any extensive planting. The demand for this variety this year even before our catalog is out is so great that our supply will probably be exhausted long before the season is over.

ONLY PLACE SEED CAN BE SECURED

Aside from the small quantities of Baltic alfalfa seed sold by us during the past 3 years and the original stock on Mr. Kelley's farm there is no Baltic alfalfa of known origin and record in the country to-day outside of our own. From the small amounts sold by us very little seed could have been produced to date by ordinary methods. From this it is very apparent that no other Baltic alfalfa seed can be offered by any other seedsmen but ourselves. We make this statement to protect our customers from any fraudulent offers that may be made. Our seed this year is of very choice quality and high germination.

For prices of Baltic Alfalfa See Page 11.

Note. The seed from which the above photographs were taken was produced in the vicinity of Mitchell on the same farm under the same conditions in 1911. The total precipitation from Jan. to the time the seed was harvested in August, 1911 was 13.73 inches. The average acre yield of seed for the three varieties was 296 pounds or about 5 bushels, giving a financial return at market values of over \$50.00 per acre. In 1910 with a precipitation of 9.11 inches for the same period of the year, the acre yield of seed from the same field was 190 pounds, or over 3 bushels, returning over \$30.00 per acre.

THE BALTIC HAS "MADE GOOD"

Mr. Chas. J. Brand in Bulletin No. 209 of the Bureau of Plant Industry in referring to trials at the Minnesota Experiment Station writes as follows:

"In this experiment were what may be truly termed the hardiest of all known cultivated alfalfas, including the Grimm, Wheeler's so-called Baltic alfalfa, and the hardy strains of acclimatized Turkestan alfalfa selected by Wheeler at Highmore and Brookings, S. D., presumably from Hansen's original importation, S. P. I. No. 991, which came from the cotton-growing sections of Turkestan."

In table XIX of the same bulletin, Mr. Brand gives detailed results from all strains tested and summarizes these results as follows:

Summary (Average Losses)	Percentage of Loss
Grimm, 7 strains	4.7
Selected by Wheeler, 6 strains	5.8
Ordinary, 3 strains	84.5

GRIMM OR S. D. No. 162 ALFALFA

So much has been written the last 5 or 6 years regarding the Grimm alfalfa and its unusual hardness that it is hardly necessary here to go into detail. The Grimm is not a pedigreed stock in the true sense of the word but is a regional stock imported into Minnesota by Mr. Grimm in 1857. It has been grown in the vicinity of Mr. Grimm's home near Excelsior, Minnesota, ever since its first introduction. It has been tested at nearly

Perfectly Happy in 4th Crop of Grimm Alfalfa on a Minnesota Farm.

all the northern experiment stations in comparison with other stocks, and never to my knowledge has it been excelled by any other variety in cold resistance. If the fame of the Grimm alfalfa rested upon just one test in one locality there might be a question as to the value of its record, but when one considers that it has been tested at the Minnesota Experiment stations, at the Fargo and Dickinson stations in North Dakota, Brookings, Highmore and Belle Fourche stations in South Dakota, Indian Head, Saskatchewan and many other points, and has never shown any winter-killing to speak of, its record is certainly remarkable. Aside from the hardness of the Grimm, it has also shown the very highest seed production and the greatest vigor of early spring growth of all varieties tested at the South Dakota Experiment Station. Because of the special adaptability of the Grimm alfalfa to the Northwest, it is much easier to secure a good stand of the Grimm than of

any other stock except the Baltic. Ten pounds of seed of Grimm or Baltic alfalfa sown per acre usually produces as good a stand as 20 pounds of almost any other stock. Grimm and Baltic alfalfas are deserving of unqualified recommendation for any locality in the Northwest and particularly where hardness is the first consideration. For prices see page 11.

HARDIEST ALFALFA VARIETIES FOR NORTH DAKOTA.

The United States Department of Agriculture in cooperation with the North Dakota Sub-Experiment Station at Dickinson, North Dakota has been conducting the most extensive and thorough test of varieties for hardness ever carried on in this country. Sixty-eight strains or varieties are included in this test. The source of these varieties represent almost every alfalfa growing country of the world. These were subjected to identical conditions and treatment in hill and drill rows. The winter of 1908-9 was one of the most trying winters for alfalfa ever experienced. There were eleven consecutive days of the winter which averaged colder than any similar period in any winter since records have been kept. Seven-eighths of the varieties lost over half their stand. Of the nine strains that lost less than half only four varieties lost less than thirty-five per cent of their stand. These varieties in order of winter resistance are Grimm, Baltic, Wheeler's Acclimatized Turkestan, and Mongolian Alfalfa No. 21232. Out of these four varieties three are Northern. Acclimatized varieties listed in this seed-book and the seeds of two of these varieties for the test were furnished by the writer.

In this test there are many stocks of Montana grown alfalfa, Commercial Turkestan, and others from northern sources but all of these lost a high percentage of their stand. It must be remembered that this was an unusually severe test. If these had been grown in broadcast plots it is probable that the four hardy varieties mentioned would have survived the winter with a perfect stand. Growing alfalfa in hill and drill rows is the most severe test that can be given. The complete report of this test is given in Bul. 135 to which we call attention on page 12.

Ideal Method of Curing Alfalfa.

to which we call attention on page 12

ACCLIMATIZED TURKESTAN ALFALFA

We do not handle imported Turkestan alfalfa for one great reason and that is that the original source of the seed is too uncertain and we are too far away to import the seed directly from the northern growers. In using imported Turkestan seed one runs altogether too great a risk of getting something entirely unsuited to his conditions. One might just as well and we think better buy seed on the open market in the United States without knowing in what part of the country it was grown.

We have, however, two acclimatized stocks that have "made good" in more than ten years growth in South Dakota. These we offer entirely on their merit as shown by test.

FIG. 6—Cutting Second Crop of Alfalfa on the Farm of Isaac Lincoln, Aberdeen, S. D.

WHEELER'S ACCLIMATIZED TURKESTAN NO. 1 OR S. D. NO. 240.

The original seed of this alfalfa was brought from Tashken, Turkestan in 1898 by Prof. N. E. Hansen for the U. S. Department of Agriculture. It was sown at the Highmore South Dakota Experiment Station in 1899. The original field at Highmore still has a very good stand, and it has passed through some very cold winters and some very dry summers. At Dickinson, N. D., in a test of 68 varieties this ranked second in hardiness, the Grimm being first. These 68 alfalfas were subjected to the most severe conditions on record at the station. Wheeler's Acclimatized Turkestan lost nine per cent while the second sample of Grimm lost about seven per cent by winter-killing. Bulletin No. 185 of the Bureau of Plant Industry gives three and one-half pages (pages 51-55) to a discussion of the valuable traits of this alfalfa. This bulletin should be read by every farmer in the Northwest. For prices of seed see page 11.

WHEELER'S ACCLIMATIZED TURKESTAN NO. 2 or S. D. NO. 164.

This is from the same original source as our No. 1 or S. D. No. 240, but was originally sown at Brookings instead of Highmore and transferred to Highmore in 1905. In comparison with our No. 1 it seems to be equal in every respect and better than No. 1 in seed production. For prices see page 11.

IMPORTANT GOVERNMENT BULLETINS

We would advise anyone particularly interested in the subject of hardy alfalfa to read the following bulletins. They can be secured from the Supt. of Documents, Gov't. Printing Office, Washington, D. C.

Cold Resistance of Alfalfa and Some Factors Influencing it by Chas. J. Brand and L. R. Waldron, Bul. No. 185, Bur. of Pl. Ind., U. S. Dep't. of Agr.

Breeding Drought-Resistant Forage Plants for the Great Plains Area by Arthur C. Dillman, Bul. No. 196, Bur. of Pl. Ind. U. S. Dep't. of Agr.

Grimm Alfalfa and Its Utilization in the Northwest by Chas. J. Brand, Bul. 209, Bur. of Pl. Ind., U. S. Dep't. of Agr.

Alfalfa by J. M. Westgate, Farmers' Bul. No. 339, U. S. Dep't. of Agr.

Variegated Alfalfa by J. M. Westgate, Bul. No. 169, Bur. of Pl. Ind., U. S. Dep't. of Agr.

Special mention should also be given to a booklet on Alfalfa published by the C. & N. W. R. R., 315 Jackson Boulevard, Chicago, Ill.

OUR METHOD OF HANDLING SEED CORN

HOW AND WHERE OUR SEED CORN IS GROWN.

Our corn is all grown under conditions that are right to produce that particular kind of corn. In order to produce the highest quality of seed that will give the greatest returns possible of the best corn we study each variety carefully and handle it in such manner as to produce the results desired. For example, corn for North Dakota is secured from the best breeders and growers in the region for which we are growing the corn and is grown for us one hundred miles or more south of the locality where the corn is bred so that it will fully mature before any possibility of freezing. We have fully demonstrated that corn so matured has a much higher vitality than corn which takes the whole season up to the last day of grace in order to ripen. Every year we go back to the same breeders and secure carefully bred stock from which to grow the corn that we ship out. To be sure, this is growing corn south of where we expect to sell it.

It must be held in mind, though, that this corn is being bred under the northern conditions and that the growing of the stock south for one year will make no apparent difference in the season when the corn is taken back to its home locality. The extra vitality secured in having the corn fully ripen at the season of the year when it should ripen more than offsets any possible objection to having the stock grown south for one year.

We follow this practice particularly with corn for the extreme north for it is impossible to secure varieties that will ripen there so as to produce satisfactory seed corn every year. In fact, North Dakota produces but a small portion of the seed corn that is used. If it could be depended upon to do this satisfactorily every year we would say that the seed corn grown there, properly matured and carefully handled by the best methods would be our first choice.

OUR METHOD ASSURES BEST RESULTS.

Under the existing conditions, our method comes the nearest to the ideal for northern seed corn. We have consulted the Agronomists of the Experiment Stations of Minnesota, North and South Dakota on this proposition and have their approval of the method.

On stocks of corn for southern South Dakota, southern Minnesota, northern Iowa and northern Nebraska we do not find it so necessary to grow the corn south of its home locality for we recommend the earlier varieties that mature by the 10th to the 15th of September. Even here, however, we try to maintain the earliness of all our stocks by having them bred in the northern part of the region to which they are adapted and grow our stocks of seed a little south of this locality.

CAREFUL SELECTION OF SEED CORN.

All of our corn is selected first at the time of husking. This first selection includes from one-fifth to one-third of the output, depending upon the variety and the conditions of growing. If the variety contains more moisture than would be contained in good air dry corn it is racked, and selected again at the time of racking. When the corn is removed from the racks and prepared for shipping, it is all gone over again and all ears which appear to be shrunken or in any other ways show signs of poor quality or vitality are culled out. Corn that is bred in the north and grown south is usually so dry at the time of husking that it shells quite a percentage from the ear in handling. Such corn is not racked, but is carefully stored in small piles or small crates in a dry room. This is given a second selection at the time it is prepared for shipment. All our corn is, therefore, selected on the ear at least twice and much of it three times before it is shelled or shipped.

RESULTS OF GRADING SEED CORN

Top—Ungraded shelled seed corn containing all large butt kernels, small tip kernels and poorly shaped kernels.

Bottom—Left—Graded seed ready for planting.

Bottom—Right—Cull corn made up of butt, tip and bad-shaped kernels screened out by the grading process.

JUST BECAUSE MOST NEW CORN IS UNFIT FOR SEED DON'T THINK ALL OLD CORN WILL GROW.

TESTING.

All lots of corn that come into our warehouse are tested for germination when they come in. We also make tests on all lots during the time the corn is in store so that we know at any time just what the vitality of each stock is. No corn is considered as satisfactory to be shipped unless it shows a strong germination of over 85%. Most of our stocks show tests of from 90% to 100%.

Every season we discard stocks of corn which show a germination below our standard. This corn may have been carefully selected and placed on racks in our warehouses, but still show a very low germination. In such cases we simply discard the stock and sell it for feeding purposes.

Box of Ear Corn Packed for Shipment

SHIPPING EAR CORN

Various methods have been devised for the shipping of seed corn on the ear and nearly all of them have serious objections. Sacks, crates and barrels have been used but are all open to criticism. We are using the tight wire-bound box for the shipment of most of our ear-corn and we think we have something better than anything that has been used heretofore. A tight box prevents to a large extent the shelling of the corn in shipment and what does shell is held in the box. Neither can corn in a box of this kind be meddled with. Altogether, we are very well pleased with this method of shipping ear-corn.

SHELLING AND GRADING

All corn that is put out as shelled corn by us is carefully graded by the best grading machinery, thus removing practically all of the kernels that are off in size or shape. Grading removes from 20% to 40% of the shelled corn, depending upon the variety and condition of the stock. This process prepares the corn for the planter box. When graded corn is purchased there is not the shrinkage and waste that is obtained with corn purchased on the ear. We recognize the fact that it is recommended by many experiment stations and agricultural papers that all corn should be purchased on the ear. Where seed is to be used for breeding plots or where the buyer questions the selection of the corn which is made, this is the best manner to procure it. For general planting we recommend shelled and graded seed in preference to seed on the ear because it has many advantages over corn on the ear.

TEST SEED CORN BEFORE PLANTING

We advise careful testing of all seed corn before planting. This can best be accomplished by using Holden's Ideal Corn Tester. This remarkable device makes a thorough germination test in four days and will show you just what quality of seed you are planting. The tester is not expensive and is the best insurance against faulty seed that money can buy. See illustrations and full description on page 75 of this catalog.

Tray of Tested Corn From Holden's Ideal Corn Tester. Cups Marked With a Cross Indicate Ears That Failed to Grow. Complete Description of Tester on pages 74 and 75.

CORN FOR THE NORTH

IMPROVED VARIETIES MEAN GREATER PRODUCTION.

We have heard people say that North Dakota would some day produce more corn per acre and better corn than Iowa or Illinois. We hardly believe so strong a statement as this but we do know that North Dakota and other northern regions are increasing their corn acreage and yield every year and that some of the more southern localities will have to look to their laurels in corn production. The one thing that is bringing about this greater production of corn in the north is the introduction of earlier and harder varieties of high yield and good quality. We are laboring tooth and nail to secure the right corn for the north and know that our efforts are being rewarded. In our Brown County Yellow Dent we know that we have something that will produce a crop of corn under conditions where other varieties fail. We are not bragging on its purity of type and not putting it up against Reid's Yellow Dent for blue ribbons, but we are putting our highest recommendation back of it for the Northwestern states where "corn raising" is always followed with a question mark.

Cutting Corn With a Binder. The Best Method of Harvesting the Smaller Varieties of Corn in the North.

PERFORMANCE RECORD THE BASIS OF SELECTION.

All the corn we offer deserves the name of corn. We are not taking those varieties which are not productive and which are merely grown under the name of corn, but are working for those varieties that will produce good corn and enough of it to pay the farmer for growing it. We have not, however, worked for the large-eared varieties for we have found by good hard experience in the north that the smaller-eared varieties are far safer and much more productive than those with larger ears.

BEST RESULTS FROM NORTHERN BRED SEED.

Just a word as to our method of handling the northern seed corn proposition. Our early corn is practically all grown in the vicinity of Mitchell, but is all grown from seed that is bred and selected under the northern conditions for which we are growing our corn. We know that seed corn bred and developed in the extreme north but grown for one year south of this latitude to produce a high quality and high germination is better for northern planting than seed corn grown in the extreme north and only part matured. The extra vitality and growth secured by our method more than off-sets any possible lengthening of season that might be obtained in the one year this corn is grown away from home. We secure the seed from which we grow our stock from the north every year and do not continue to select it at our latitude. Results that are being obtained with this kind of corn serve to show that our position in this matter is right. It has the approval of all the agronomists of the northern states with whom we have consulted regarding it.

CORN CROP BETTER THAN SUMMER FALLOW.

Corn is grown in the north for other reasons than the mere production of a crop of corn. A corn crop takes the place of the summer fallow, and is a far better business proposition. If the crop of corn alone is a financial success it is clear gain because the benefits derived from the cultivated corn crop preceding a small grain crop will pay for the growing of the corn. Many are still making the mistake of trying to grow the large-eared, beautiful varieties that come from the south. They would far better grow one or more of our very early sorts that have been tried out and which we know will produce corn and good corn, if anything will.

CAN YOU AFFORD POOR SEED CORN?

Seed corn at \$1.00 per bushel costs from 12 to 17 cents per acre.

Seed corn at \$3 per bushel costs from 35 to 50 cents per acre.

A bushel of seed which increases the yield 5 bushels per acre at 30 cents per bushel is worth \$9.00.

Seed corn which costs \$3.00 per bushel must produce in order to pay for itself one bushel more of corn per acre than seed corn that costs \$1.00 per bushel.

The loss on a bushel of seed corn which gives a 50% stand is \$12.90 spent as rent of land not producing anything, and time spent in plowing and cultivating land without a crop.

This cut shows kernels of corn in the plates of a corn planter. This shows very plainly that one cannot secure an even stand of corn by planting a mixture of tip, middle and butt kernels. The only way to avoid this is to plant graded seed corn. The extra yield secured will pay 500% on the extra cost of well graded seed.

BROWN COUNTY YELLOW DENT CORN

THE EARLIEST, HARDIEST AND MOST DROUTH-RESISTANT CORN KNOWN.

In 1906 we first ran across a variety of corn in Brown County which had made a good record for yield and earliness. It has been grown there and has matured satisfactorily every year for the past 18 or 20 years. It has been tested at the Highmore Experiment Station where it yielded between 45 and 50 bushels per acre. In 1907 at the same Experiment Station this corn out-yielded all other varieties and showed a drouth resistance second to none. In fact there was no corn at the Highmore Station in 1907 that was nearly equal to this in resisting dry weather. In type it resembles the Pride of the North and North Dakota Golden Dent. It has not been selected to uniformity of type and shows quite a variation in color and shape of kernel. This, however, does not injure it in any

way when it comes to producing a good yield of corn under adverse circumstances. We believe that this corn planted in the northern part of South Dakota or in North Dakota is as safe a proposition as anything in the way of corn that can be secured. The seed from which our stock was grown has been grown continuously in Brown County for the past 18 or 20 years. Our stock is very good. Germination tests on this stock are running from 90 to 97% at time this catalog goes to press. We offer it shelled and graded per bushel \$3.50; 4 bushels or over \$3.00 per bushel.

THEY LIKE OUR BROWN COUNTY YELLOW DENT.

Brown County Yellow Dent corn is a good corn for this part of South Dakota. I like your manner of doing business and believe you are on the right track for success.
J. A. Halk, New Underwood, S. D.

Your seeds have always been the best I could get anywhere and the seed corn has been fine. Your Brown County Yellow Dent is, I think, the best corn I have tried for the Black Hills country.
E. D. Smith, Piedmont, S. D.

The Brown County Yellow Dent corn is the best I have ever planted.

Hans Knudson, Andrews, Nebr.

I was well pleased with the Brown County Yellow Dent corn that I received of you. It was just as it was recommended.

H. A. Bigelow, Wessington Springs, S. D.

Permit me to speak a word of praise for your Brown County Yellow Dent corn. The half bushel of seed which I got from you last spring did not reach me until after all my other corn was planted. I planted this on a separate plot and gave it the same treatment as my other corn. We had no rain from July 4th until August 13th—at the latter date the Brown County Dent corn was well eared with an occasional ear getting ripe while the rest of my corn was standing still waiting for rain. Had it not rained on August 13th the Brown County Dent would have made good corn, as it was practically made at that time, while the other corn would have been a failure. My main crop the following year will be Brown County Dent, for, although it is a small corn, it is more drouth resistant than any other corn in South Dakota. I would recommend its use everywhere west of the 99th parallel.

Yours respectfully,

H. H. Stoner, Highmore, S. D., Jan. 16, 1909.

You want a tester that will separate weak ears from strong ears as well as live kernels from dead kernels. Holden's Ideal is the only tester than can be depended upon to do this.

Ask us about ear-tested seed corn.

EARLY
PRIDE

CORN

This variety is much earlier than the Minnesota No. 13 and within a few days as early as the Brown County Yellow Dent. It is really an early strain of the Pride of the North. Those who are acquainted with the Pride of the North know that it shells more corn in

proportion to cob than any other variety known. This holds true with this early strain. There are many other large eared stocks that are sold for Pride of the North that are not of the early type. We recommend this very highly for the northern half of South Dakota. Our stock is very good and shows a very high and strong germination. Per bushel shelled and graded \$3.50; 4 bushels or over at \$3.00 per bushel.

VARIETIES OF FLINT CORN

There is always a large demand for flint corn in all the Northern states and Canada. The various types of flint corn vary somewhat in earliness and yield but all of them seem to possess the ability to mature a good crop of corn under adverse conditions. In the Northwest, flint corn is largely used as a crop for "new breaking." It is also much used for late planting where early crops fail to grow or for any reason the crop cannot be planted until late in the season. In this latitude it can usually be depended upon to produce good corn if planted as late as the 4th of July. Flint corn is a very good type of corn to plant where the crop is to be fed in the field. It may be planted either alone or with other forage crops for this purpose.

Prices. We have this year some excellent stocks of flint corn all well matured and of high germination. We offer the following varieties shelled and graded at \$3.00 per bushel; 4 bushels or over at \$2.75 per bushel.

Squaw. A very early "native" variety having kernels all colors of the rainbow. A very beautiful corn and one that is very popular for late planting.

Gehu. Probably the earliest type of flint corn. Ears small, short, yellow in color.

Compton's Yellow. A standard early yellow flint corn. Ears 10-12 rowed and of good size; color, yellow. A good yielder and very early.

Longfellow. An 8-rowed yellow flint variety well known almost everywhere in the north. A good yielder and very popular.

Sanford White. Similar to Longfellow except for color which is white. This is the standard white flint variety and is largely grown in both the States and Canada.

Office of Superintendent, South Dakota Training School, Plankinton, S. D.

January 16, 1909.

Dakota Improved Seed Company,

Gentlemen:—

I am now preparing an order for seeds that I will soon send you. The purchases of seeds that we made of you last year were very satisfactory. I want to express my appreciation of the good work you are doing for the State. It is a matter of great importance to our people to know that they can, from a home company, procure seeds that have been carefully tested and that have a high percentage of germination.

Very truly yours,

B. E. Young, Supt.

Don't buy any but guaranteed seed corn this year.

If you keep chickens you need a Buckeye Incubator. See page 62.

MINNESOTA
No. 13

CORN

ANOTHER IMPORTANT VARIETY.

This corn needs no recommendation from us. Anyone who has been at all in touch with corn growing in Minnesota, and the Dakotas knows about Minnesota No. 13 and its record. Introduced by the Minnesota Experiment Station in 1896 it has been distributed across the United States and into some portions of Canada. It is generally considered as the best early corn. We now have some varieties that are earlier but it is difficult to find as early a corn as Minnesota No. 13 that is equal in quality and yield. It will go down into history as having done more to extend the corn belt in the northern states than any other one variety. The yield of Minnesota No. 13 in Minnesota and the Dakotas

ranges from 40 to 90 bushels per acre; 50 bushels per acre is an average yield. One field of this strain at Mitchell in 1908 produced good ripe corn in 87 days from the time it was planted. We recommend this strain for central South Dakota and south Central Minnesota. We do not recommend it for southern South Dakota or northern Iowa for there are varieties which will give better returns at this latitude.

We have made arrangements with Mr. Otto Uhlhorn of St. James, Minnesota to grow this strain of Minnesota No. 13 corn for us. For several years Mr. Uhlhorn has conducted with great care a breeding plot of this variety in co-operation with the Minnesota Experiment Station. Each year the Station uses five ears from each of the highest yielding rows in the ear-to-the-row test for their work and Mr. Uhlhorn selects the seed for his field from the remaining corn in these high-yielding rows. In 1909 the average yield of the rows in the breeding plot was 65 bushels per acre; the highest yielded about 70 bushels and the lowest 59 bushels. We know of no better stock of Minnesota No. 13 than that grown by Mr. Uhlhorn.

We offer high germinating stock shelled and graded; single bushel, \$4.00; 4 bushels or over at \$3.50 per bushel.

Minnesota No. 13 with me is a dependable standby, when others failed this stood by me. Your seeds and manner of doing business are good and one feature I like is your tag system.

A. A. Webster,
LaFayette, Minn.

MINNESOTA NO. 13 CORN.

NORTHWESTERN DENT CORN

This variety is a cross between a flint and a dent corn. The kernels are red and have a yellowish cap. In North Dakota this corn is grown perhaps more largely than any other one variety. It is extremely early and hardy in North Dakota and northern South Dakota. The ears are of fair size, rather long and slender. No other variety seems to have given the uniformly satisfactory returns in North Dakota that are given by the Northwestern Dent. Price per bushel shelled and graded \$3.50; 4 bushels or over at \$3.25 per bushel.

MINNESOTA KING CORN

Like Northwestern Dent this variety is a cross between a flint and a dent corn. In color and type of kernel it is very different from Northwestern Dent. The kernels are broad, flat, orange-yellow in color and have a long well-defined dent. This type of corn has been grown in many parts of North and South Dakota and has given very satisfactory yields of well matured corn. It is suited to about the same region as the Northwestern Dent. Price per bushel shelled and graded \$3.25 per bushel; 4 bushels or over, \$3.00 per bushel.

I have had better success with your cucumbers, beet and salsify than any I ever sowed.

Chas. Chambers, Stratford, N. D.

EARLY MURDOCK CORN

EXCEPTIONALLY GOOD VARIETY FOR NORTHWEST.

In northern Illinois, northern half of Iowa, northeastern Nebraska, southern half of South Dakota and Wisconsin and the southern tier of counties in Minnesota there are many serious problems that come in the growing of corn. This great region happens to be in the latitude where the very large varieties of corn are occasionally caught by frost. It is true that in some years such varieties as Reid's Yellow Dent, Silver Mine and others of this season mature satisfactorily and give very fine yields. There are other years in which these late varieties of corn are caught by frost and the crop is more or less damaged. Our Agricultural Colleges, Farmers' Institutes and farm papers have been pushing early seed-corn for a number of years for this region. Some have gone so far as to say that Reid's Yellow Dent should not be grown north of Des Moines, Iowa. Others have made equally radical statements regarding the late varieties of corn.

Early Murdock Corn Grown by C. F. Maynard, Burbank, S. D.

In offering the early Murdock corn we have a variety that has for the past 20 or more years been developed for earliness and yield. We think it more nearly meets our ideas of the ideal corn for the region we have mentioned than any other variety we know of. It is true that the ears are not large, but they are well formed, shell off a large percentage of corn to the ear; the kernel is deep; the germ is large and the color is as near pure as any variety of yellow corn of equal earliness that we know of. In feeding value the Early Murdock ranks second to none. It is almost impossible to find a starchy ear in the lot. Every one who sees a pile of this corn for the first time remarks "What a beautiful corn" and it certainly is true that the color of this corn is beautiful. It has the richest golden-yellow of any corn that we handle. The cobs are nearly all true to type. One rarely finds a white or pink cob in the stock.

When we first offered this corn in 1908 we were not fully aware of the value of it for the Northwest. Since trying it out for four years and getting results from all those who have purchased seed of us we find that we made no mistake in offering it and are in a position now to put our unqualified recommendation back of it. We have shipped it into all parts of northern Iowa, southern Minnesota, southern South Dakota and northeastern Nebraska and so far as reports are received it has made good everywhere that it has been sent. Many even say that it is nearly as early as Minnesota No 13. In our locality however, we consider that there is a week or ten days difference between

Box of Early Murdock Packed for Shipment.

the two. The cut of a braid of ears shown on this page is from a photograph taken of corn picked from our field on August 25th, 1909. These ears were ripe and out of the way of frost at that time. Two-thirds of the field was in practically this condition.

Our stock of Early Murdock corn for this season has a germination test of over 90%. This germination is a strong germination and does not include weak sprouts. From a careful observation and estimate of the corn fields of Davison County, our home county, we think we are perfectly safe in saying that there were more acres of Early Murdock corn grown here in 1911, four years from its introduction here, than there were of all other recognized named varieties put together. And this in spite of the fact that we had to turn down hundreds of orders for Early Murdock seed corn in 1910 and supply other varieties or cancel the order altogether.

We do not especially recommend the planting of this variety of corn north of the latitude of Mitchell or the southern tier of counties in Minnesota. We have reports of very satisfactory yield and full maturity at quite a number of points north of this, but still we we do not feel fully safe in recommending it very much north of this latitude.

PRICES.

Good stock of Early Murdock is very scarce this year. We carried over a few hundred bushels from 1910 in our warehouses and this shows strong germination tests by the most severe test known of from 92 to 98%. We will guarantee this stock to test over 90% and will offer it while it lasts at the following prices: Per bushel on the ear, \$5.00. Shelled and graded, first grade, single bushel \$5.00; 4 bushels or over at \$4.50 per bushel; second grade, single bushel \$3.50; 4 bushels or over at \$3.00 per bushel. The difference between the first and second grades is only in the grading. We guarantee the same germination test on both grades. Samples furnished on application.

WHAT OTHERS THINK OF EARLY MURDOCK.

You sent me 1 bushel of early Murdock corn. It is a little better than my other corn but it grew good and is the best crop I ever raised.

D. C. Brooks, Myron, Minn.

I intend writing you to let you know that I changed my mind last spring and planted that bushel of Brown County Dent corn. I planted it on the 16th of June, almost too late to plant, yet on the 10th inst. I picked ripe corn. The white corn of my own raising which I planted at the same time will not have any corn at all.

I honestly believe if I had planted the Brown County Dent corn about the first of June I would have had a better crop. It is certainly the corn for this county. It had no rain to speak of—the rains going all around us this summer. If I stay in this country another year I will plant nothing but Brown County Dent.

Geo. W. Stangl, Okaton, S. D., Sept. 26, 1910.

I think your seeds are all right. I ordered 2 bushels of Early Murdock corn and you were sold out of that variety. You sent 2 bushels of white corn and every kernel grew. Had the best stand of corn this year for a long time.

Dudley Allen,
Spencer, Nebr.

The Early Murdock is a good corn for this country. It will ripen here if it has half a chance. This has been a very poor year with us for corn, but last year I planted some June 10th. It did fine and got ripe too.

J. D. Vroom, Howard S. D.

I have bought seeds from you two seasons, once while in N. Dak. All have proved to be of high germination. Your method of doing business has been satisfactory to me—filling orders as far as possible promptly and not delaying the whole order on account of being short on a few, and then forwarding shortage at the earliest possible time.

Fred J. Engel, Alzada, Mont.
The seed that I got from you was O. K.
C. F. Bartels, Wagner, S. D.

Read our money-back guarantee on seed corn. No other seed firm does this.

RIVERVIEW SPECIAL

CORN

The Riverview Special has been developed by W. S. Hill on his Riverview Ranch five miles south of Alexandria, S. D. Riverview Ranch consists of 1360 acres and is located along the Jim River in the best corn growing section of the county. It is the home of the famous Riverview herd of Red Polled Cattle which has taken first place at the state fairs of Minnesota, South Dakota, Iowa and Nebraska for several years. Mr. Hill has grown hundred of acres of Riverview Special corn every year for several years and has maintained a separate breeding plot from which to select his seed, special care being taken to improve it in both quality and yield. The Riverview Special is a strain of the corn known in Hanson county under the name of Shabino corn. Several strains of this corn have been developed in the hands of special breeders under the names of Dakota Gold, Fulton Yellow Dent, Hanson County Yellow Dent, Riverview Special and others. We have looked these over carefully and we think the Riverview Special which we are offering

A Group of Buildings on Riverview Ranch the Home of Riverview Special Corn and the Riverview Herd of Red Polled Cattle.

here comes nearer meeting our needs for latitude than the others. This strain hasn't been selected for the largest type of corn. The ear, however, is of good size and the season of the corn is somewhat earlier than some of the other strains. None of the types have been selected so that they are very pure, but all are good yielders, have a good depth of kernel, shell a large percentage of corn to the ear, produce an ear on practically every stalk, and, summing it all up, they produce a good yield of fine quality corn.

Price, shelled and graded, per bushel, \$3.50; 4 bushels or over \$3.25 per bushel. We can also offer a small quantity of ear-tested stock at \$5.00 per bushel.

WISCONSIN WHITE DENT

A medium early white corn similar in type and season to the well-known Silver King. Adapted to the southern half of Wisconsin and South Dakota, southern tiers of counties in Minnesota and Northern Nebraska, Iowa and Illinois. The type of ear and depth of kernel are good.

This variety and the Silver King and Minnehaha are all adapted to about the same region and latitude. If for any reason any one of the three is not available either of the others may be considered as a good substitute.

Our stock this season is of good germination and quality. We offer it shelled and graded at \$3.50 per bushel; 4 bushels or over at \$3.25 per bushel.

DISCO WHITE DENT

This corn has taken more premiums for white corn at the South Dakota State Corn Show than any other one variety. It has won first on white corn for the central district 2 years in succession and can always be depended upon to show up well.

This corn has been developed by Mr. Robert Dailey of Moody county, South Dakota. Mr. Dailey reports this to be earlier and a better yielder than his Minnesota No. 13. Whether this comparison of earliness will hold good in all other localities remains to be determined by trial. We grew several fields of this variety in the vicinity of Mitchell in 1911 and it fully came up to recommendations of Mr. Dailey. It is certainly worthy of a trial in all localities where Minnesota No. 13 is now being grown. Price shelled and graded per bushel \$3.50; 4 bushels or over \$3.25 per bushel.

Note. We realize at the time this catalog goes to press that there is to be an unprecedented demand for seed corn that will grow this season. We have excellent stocks of our standard varieties on hand but fearing that our supply of these may not be equal to the demand we have secured some good high germinating stocks of good early types of corn from growers in various parts of the Northwest and will offer these at prices as reasonable as possible consistent with the expense and effort required to test and locate these stocks. The prices on these stocks will probably range from \$2.00 to \$3.00 per bushel. Write to us stating your needs and we will do our best to furnish you with just what you want.

MINNEHAHA WHITE DENT CORN

This variety of corn has been grown by Mr. A. C. Collins at Sioux Falls, S. D., for about a dozen years. During this time it has yielded from 50 to 80 bushels per acre. In point of yield we do not know that there is another variety in the southern part of the state that excels it. It is certainly a very strong strain of white dent. Our illustration

First Premium Minnehaha Dent, S. D. Corn Growers' Association, 1906.

shows the first prize ten ears of corn at the S. D. Corn Growers' Association in 1906. This variety also took the first premium at the South Dakota Fair in 1909. Wherever entered this corn carries away some of the premiums. Many of the selected ears from the crop of 1910 weighed over 20 ounces each when gathered and did not lose more than from one to two ounces in drying. In general we do not approve of the selection of large ears for planting. Our observations seem to show that with most varieties the biggest yield is obtained through the selection of the medium sized ears of the type or variety. In the Minnehaha White Dent however, Mr. Collins has secured a combination of size of ear, earliness and productiveness that is hard to beat for the latitude of Sioux Falls and Mitchell. It is Mr. Collins' corn that has put Minnehaha county on the map in the production of large corn. This was particularly noticeable the

season of 1910, when this corn out-distanced all its competitors in both earliness and yield.

Mr. Collins has planted this corn on all kinds of land and under all conditions and has never failed to produce a good crop. Mr. Collins is now eighty years old and has worked long and hard in studying the production of good corn. When he is gone the Minnehaha White Dent will be left as a monument to his courage and ability.

The stock we offer this season is 1910 crop and was grown and cured on the farm of Mr. Collins near Sioux Falls. Per bushel on the ear or shelled and graded \$4.50. 4 bushels or over at \$4.25.

A GOOD TIP

SILVER KING CORN

In describing this variety of corn we quote from the book "Corn" by Bowman & Crosby:

"History. Silver King Early Dent corn was originated and developed by A. J. Goddard of Fort Atkinson, Iowa. Of the truly great breeders of corn which have carried on their work in Iowa, Mr. Goddard is the foremost. In 1869 he purchased a bushel of seed corn from a man living in Eldorado, Fayette County, Iowa. The seed originally came from Indiana. Mr. Goddard has persistently kept the large, yet early maturing type in mind. Selection in the field each year has tended to produce uniformity and fixity of breed characteristics. Silver King corn was successfully shown at the World's Fair in New Orleans in 1884 and again at Chicago in 1886. Its value as a heavy yielder for the northern localities has led Prof. R. A. Moore, of the Wisconsin Agricultural College, to distribute it over the state. Results show its adaptability. Breed

Characteristics. It is a pure white corn, very large ears for northern sections. The butts and tips have been bred to complete filling. The grain is very deep for such an early corn. Its maturity is assured every year."

The Silver King corn in southern Minnesota and South Dakota has equalled its record in northern Iowa. We secured the seed for our crop in 1910 from southern Minnesota where it was grown by Mr. Goddard, the originator. We can recommend this corn along with the Minnehaha White Dent for the latitude of southern Minnesota, northern Iowa and South Dakota south of Mitchell and Sioux Falls. Per bushel, shelled and graded \$4.50; 5 bushels or more at \$4.25 per bushel.

FODDER CORN

VARIETIES ESPECIALLY SUITABLE FOR
EITHER ENSILAGE OR DRY FEED.

Fodder corn is a very valuable crop on the farm, but in the Northwest in particular it occupies a place that cannot be filled well by any other crop. It not only produces a large amount of forage to the acre, but supplies a cultivated crop that can be used in systems of crop rotation in place of the summer fallow. We all know that the summer fallow is not an economic proposition on the farm and that it is far better to grow a good cultivated crop and keep it well cultivated. In the selection of corn for fodder purposes we do not recommend planting the very large late varieties in the north because they do not come near enough to maturity to produce the largest amount of feeding value. They are mostly wood fiber and water. We recommend the early varieties that come nearly or quite to maturity for this purpose. It is not so necessary that the crop fully mature as it is with corn grown for other purposes but the nearer it comes to maturity the greater the food value and the more valuable it is to the stock feeding on it.

Fodder corn is also a good weed eradicator. When further cultivation is impossible it shades the ground to such an extent that very few weeds are developed.

Northern Fodder Corn suitable for growing in the extreme north. We use the earliest varieties we carry for this purpose. Per bushel \$2.50, 4 bushels or over at \$2.25 per bushel.

Medium Fodder Corn includes varieties like the Early Murdock and others of this season. Per bushel \$2.50; 4 bushels or over at \$2.25 per bushel.

Early Sweet Fodder, very fine for early feed. Sow broadcast or in drills. Pk. \$1.25 ½ bu. \$2.25, bushel \$4.00.

Evergreen Sweet Fodder. Tall growing sweet corn producing a large weight of foliage and stalks per acre. Pk. \$1.25; ½ bu. \$2.25, bushel \$4.00.

Rape Sown in Corn at Last Cultivation.

SPECIAL VARIETIES OF FIELD CORN

In spite of unfavorable conditions the past fall we are in the best shape to fill orders for seed corn this year. We have stocks for the extreme north as well as medium early varieties for the latitude of Southern Minnesota, South Dakota, Wisconsin and Northern Nebraska, Iowa and Illinois. All guaranteed to be fully matured, well dried and cured and of high germination. Write for samples and prices and tell us just what you want. Our special service department will handle your inquiries promptly. Write early so as to avoid the rush season.

EAR TESTED CORN

Every year we have demands made upon us for ear-tested corn. We have been able to fill a part of such orders but not all. This year we are in better position to do this than ever before and will endeavor to fill special orders for single-ear-tested corn, as far as possible. As most of the ear-testing is done after the orders are received we would advise placing orders very early. Prices will range from \$5.00 to \$10.00 per bushel depending upon variety and size of ear.

Not two per cent of all corn in the Northwest this year including both 1910 and 1911 crops is fit for seed. Buy only guaranteed tested seed corn. It is cheapest in the end. We test our corn by the most severe test known. We use Holden's Ideal Corn Tester described on page 75. Corn showing strong sprouts in this tester will grow under the most severe conditions.

ORDER YOUR SEED CORN EARLY.

In the business I have done with you, I have found you nothing but straight in all your affairs, and I feel I can rely on what you say. A. A. Norgren, Centerville, S. D.

I think your seeds are all right and I think your way of doing business is right. Emil Steffen, White Lake, S. D.

MINNESOTA WHEAT

No. 169

The Minnesota No. 169 occupies the highest position for quality as a milling wheat. It has won a national reputation in this respect. In Minnesota and some parts of North and South Dakota it appears to top the list for yield and we are inclined to think that taking everything into consideration it is one of the finest wheats known today in the Northwest. In Minnesota it has yielded from 3 to 5 bushels more per acre than the common varieties. In the northwestern and southeastern portions of South Dakota it has yielded well and has also become very popular. For anyone who has grown any blue stem varieties and has been successful with them we can recommend this as we know of no better variety for the northwest. We have a very good quality of pedigreed graded stock, which we can offer at the following prices: Per bushel \$2.00; per sack of 2½ bushels \$4.75; 4 sacks or more at \$4.50 per sack.

SOUTH DAKOTA BEARDED RED FIFE

This variety of wheat has the best record for yield of any variety in the Northwest including all the Blue Stems and Beardless Fifes. All through South Dakota it yields from 2 to 10 bushels more than the standard bread wheats. There is an impression prevailing among the millers that this wheat is of low milling quality. However, recent tests of the milling quality of this wheat at the North Dakota Experiment Station show it to rank with the very best milling wheats. On account of these recent more favorable milling tests this wheat is fast regaining its former high position among our growers. We consider it the most profitable wheat to grow in many sections of the Northwest. Prices same as for Minnesota No. 169.

KUBANKA DURUM WHEAT

In a large part of North and South Dakota the durum wheats have come to stay. They are particularly adapted to the dry regions and therefore do much better in the western portion of these two states. We do not recommend the growing of the durum wheats on an extensive scale much east of the James River in South Dakota. In many of the drier sections they have been known to give returns from 35 to 40 bushels per acre in seasons when the best bread varieties yielded from 12 to 18.

Per bushel \$2.00; Per sack of 2½ bushels \$4.00; 4 sacks or more at \$3.75 per sack.

TURKEY RED WINTER WHEAT.

The growing of winter wheat is still more or less of an experiment in North Dakota and northern Minnesota but it is coming to be grown to a large extent in the southern half of Minnesota and in South Dakota. Turkey Red is the standard variety. Write for samples and prices about August first.

EMMER or SPELTZ

This crop is becoming more popular every year. Very few farmers in the Northwestern Great Plains Region can afford to be without it. It produces a good yield under adverse circumstances where other crops would fail. It will stand more dry weather than any other grain crops with the possible exception of durum wheat. It produces more food value per acre than any of our other grains and is a valuable feed for all kinds of stock. The plant is almost entirely free from rust, smut and other grain diseases.

We wish to do everything we can to encourage the growing of Emmer in the Northwest. Farmers in the semi-arid portions of the Great Plains Region who depend on such crops as Swedish Select Oats, Hanna No. 24 Barley, Brome-grass and Alfalfa need have no more fear of crop failures than those in the regions of more abundant rainfall. Emmer should occupy a place in every dry-farming rotation.

Price per bushel of 40 lbs., \$1.00; 100 lbs., \$2.00; 500 lbs., or over at \$1.85 per cwt. Prices subject to change.

Heads of Emmer or Speltz.
Very similar to wheat heads.

We like your way of doing business all right. You have always been punctual about sending the seeds which we have ordered and sent us a notice that you had received our order all right.

Theo. Cheney, Northfield, Minn.

Was particularly pleased with the seeds I bought from you. They were as you represented and were exactly like the samples you sent before I ordered.

J. J. Walsh, Armour, S. D.

SIXTY-DAY or KHERSON

OATS

Description. This is a vigorous growing oat, but not rank. Straw is short and stiff, thus reducing the tendency to lodge. The grain is light yellow in color and small, but is produced in great numbers. The hull is extremely thin. The grain weighs unusually high per bushel. Throughout the Great Plains region this oat not only usually leads in yield per acre, but in weight per bushel. And the fact that it ripens 7 to 21 days earlier than other varieties gets it entirely out of the way of rust, drouth and hot winds which are fatal to so many oats. This explains its immense yield per acre as compared with later varieties.

Exhibit Made by the Dakota Improved Seed Co., at the South Dakota State Fair in 1909.

Region to Which Adapted. The Sixty-Day oat is particularly adapted to most of the Great Plains regions including North and South Dakota, Montana, Minnesota, Wisconsin, Iowa, Nebraska, Kansas and Missouri. It is undoubtedly also adapted to other regions where it has not been tried.

Seeding: Sixty-day or Kherson Oats do not need to be seeded as heavily as other varieties. In the north two bushels per acre is a good seeding. We think this is plenty for the south but some recommend $2\frac{1}{4}$ to $2\frac{1}{2}$ bushels per acre.

REASONS WHY YOU SHOULD GROW THE SIXTY-DAY OATS

It outyields all other varieties in North and South Dakota, Montana, Minnesota, Wisconsin, Illinois and Kansas, as shown by test.

It is adapted to the widest range of soil and climate of any Oat grown in the United States today.

It is the earliest of all oats. Ripens before or at the same time as barley.

It gets out of the way of rust, drouth, hail storms and hot winds.

It does not lodge. Growth just right to stand up under conditions where other varieties fall.

It has the thinnest hull of any variety. Eighty or ninety bushels of Sixty-Day Oats are equal in feeding value to one hundred bushels of most standard varieties.

It leads all varieties commonly grown, in weight per bushel.

Prices: Single bushel, \$1.15; sack of $2\frac{1}{2}$ bushels, \$2.50; 4 sacks or more of $2\frac{1}{2}$ bushels each at \$2.25 per sack. Sacks are included and weighed in at these prices.

SWEDISH SELECT OATS

This variety of oats has been widely distributed throughout South Dakota, Minnesota and Wisconsin, and also in other states, and everywhere it has been grown it has given yields equal or better than most other varieties grown. The Experiment Stations of Wisconsin and South Dakota have probably done more towards the introduction of this variety of oats than has been done in any other way. In Wisconsin it is recommended above all others. At the Highmore Experiment Station in South Dakota where this variety has been grown for several years, it has won a great reputation for its drouth resistance. No other variety has shown up better in this one feature than has the Swedish Select. In the region between the James and Missouri rivers a dry period often comes in the early part of the growing season, during the month of May or early in June. At this time many varieties of oats are seriously injured by drouth. The Swedish Select, however, has shown itself capable of resisting dry weather at this season of the year better than any other variety. In fact, it has produced some of its largest yields in seasons which were dry during the early summer months. Where these oats have been grown west of the Missouri river they have given excellent results. We can furnish a very good grade of re-cleaned stock at the same prices quoted for Sixty-Day or Kherson.

FLAX

Minnesota No. 25 Flax on the Minnesota Experiment Farm.

We have no stock of Minnesota No. 25 flax to offer at present and do not think that we will have much this season.

The growing of flax the past few years has received an unusual impetus because of the exceptionally high prices that have been paid for market flax. The difficulty that has been had in securing of good seed is largely due to the fact that practically all flax seed in the market today has a small percentage of mustard seed present in the stock. It has been almost impossible to secure any that was absolutely free from this noxious weed. We have been particularly fortunate the past two years in having our stocks practically free from this pest. The past year we handled between two and three car-loads of seed that we think was perfectly free from mustard. Our "Diamond Brand Northern Flax" is so far as it is possible to determine absolutely mustard-free. Write for prices after March 1st.

BARLEY

OUR STOCK IS LIMITED—ORDER EARLY

Oderbrucker. A six-rowed barley that has been very highly recommended in the northern states, especially in Wisconsin where it has been distributed by the Wisconsin Experiment Station. Our stock two years ago came from this source. Its growth and yield in South Dakota have been very good.

Minnesota No. 105. Recommended by the Minnesota Experiment Station as the best barley for Minnesota. It has given the highest record for yields throughout Minnesota and has also given very good results in South Dakota and other states.

Minnesota No. 6. The highest yielding barley at the Brookings Experiment Station in 1908 and has held the highest record for a good six-rowed barley ever since it was first tried at this station. Very similar to Minnesota No. 105.

So long as our stock lasts of the above varieties we will offer them as follows: Per bushel \$2.00; 5 bushels or over at \$1.90 per bushel.

CANADA FIELD PEAS

Results that have been obtained in the last few years with field peas in Montana and also in the Dakotas have been remarkable. The demand in this territory is steadily increasing. They can be sown alone or with oats. We recommend the sowing of a mixture of 2 bushels of peas to one of oats. The crop can then be cut with a binder. This mixture is also good as a soiling crop or for hay as the oats serve to keep the peas up off the ground. When grown alone they are often subject to mildew. We offer the white seeded variety as follows: Per bushel \$2.90; 10 bushels or more at \$2.65 per bushel. Prices subject to change. Write for prices on the blue seeded variety.

Canadian Field Peas, Grown on the Jean Duluth Farm, Duluth, Minnesota.

SORGHUM

In many localities sorghum is taking the place of corn as a fodder crop. The reason for this is that it will stand more dry weather than corn. It also produces more weight of palatable fodder per acre. Where sorghum is grown to cut for hay it should be sown broadcast at the rate of about 30 or 40 pounds per acre. If it is to be cut with a corn binder it should be sown in drills 3 feet apart at the rate of 6 or 8 pounds per acre. We consider the latter method the better.

EARLY AMBER CANE

Amber Cane. This is the common type of Amber Cane grown throughout the northern states for fodder purposes. It produces an abundant crop of fodder of very fine quality. It can also be used for syrup and at several points in our northern states it is grown for this purpose. Per pound by mail postpaid 25 cents. By express or freight, per pound 15 cents; 5 pounds 40 cents; 10 pounds 70 cents; 100 pounds \$3.50.

Kafir Corn. This is one of the non-saccharine sorghums and is used as a fodder plant all through the Great Plains region. It makes a very strong growth and produces an abundant supply of excellent fodder either green or dry. It is highly relished by all kinds of stock. Sow at the rate of 15 to 50 pounds per acre in drills or broadcast. Per pound postpaid 20 cents. By express or freight, 10 pounds 60 cents; 50 pounds \$1.40, 100 pounds \$2.50.

DWARF ESSEX RAPE

Rape can be put to quite a number of uses. It may be sown alone as a spring crop to provide early pasture. It may be sown with spring grain to provide fall pasture after the grain is cut. In this latter case it is better sown after the grain is up and the ground dragged immediately after sowing to cover the seed. As it is a common practice to drag or weed our grain crops after they are up, the sowing of rape at this time can be easily done. Rape may also be sown just before the last cultivation of corn to provide fall feed and increase the yield of feed per acre of ground, or rape may be sown with fall rye to provide fall pasture.

The uses of rape are hardly limited to those mentioned above as it may be sown at almost any time of the year and will provide quickly a large amount of forage. The farmers of the Northwest have not yet come to realize the possibilities of rape. There are thousands of acres of land sown to small grains that could be made to yield an abundant fall pasture by the sowing of 2 pounds of rape seed to every acre of ground. The cost of the seed is so little and so small an amount is required that there is really no expense connected with it compared to the value of feed that is secured. The amount of seed that is sown per acre varies from 2 to 6 pounds depending upon the way it is handled. When sown alone from 5 to 6 pounds are recommended. When sown with small grain, 2 to 3 pounds.

Prices: Lb., postpaid 25 cents; by express or freight at purchaser's expense, 5 lbs., 50 cents; 10 lbs. 90 cents; 25 lbs., \$2.00; 100 lbs. or over at \$7.00 per 100 pounds.

Rape Sown With Small Grain for Fall Pasture.

Iceberg Radishes were excellent—best ever had. Sweet Peas (choicest mixed) were above criticism, never had such pretty ones before.

Mrs. J. H. Whitmore, Alexandria, S. D.

Get your seed corn early and put it in a dry place under lock and key. This is the best corn crop insurance you can have this year.

MILLET

Dakota Selected Kursk. Our Kursk millet has made good. We put this out to the farmers of the northwest in 1908 for the first time. As both a hay and seed producer it ranks very high as shown by results secured the past four seasons. This variety has been grown at both the South Dakota Experiment Stations every year since it was introduced in 1898 from Kursk, Russia. It has given excellent results during the whole time and in dry years the weight and quality of the hay has been far ahead of the common German or Hungarian millet. In favorable seasons the difference has not been so marked, but is always in favor of the Kursk. Our stock is grown from selections that were made at Brookings by the writer in 1904.

It has been customary among seedsmen to recommend the southern German millet to grow in the north in preference to the northern grown. In dry sections we do not think the German millet can compare with the Kursk. In a moist soil and under favorable conditions, however, the German gives excellent returns. We refer to the finer quality of German millet and not to the coarse stock that comes from the extreme south. The coarse southern seed produces a great bulk of hay but of such poor quality that we consider it of little value. Our stock of Kursk millet has been in demand by seedsmen all over the Northwest. Prices for "Diamond" brand seed; Per bushel of 50 pounds, \$1.75; per sack of 2½ bushels, \$3.50; 4 sacks or more at \$3.25 per sack. Prices for other grades of seed on application.

German Millet. This millet occasionally makes a taller, ranker growth and produces a greater weight of hay per acre than the Kursk under favorable conditions. Our stock is clean and good. Prices same as for Kursk.

Japanese Millet. This millet produces an abundance of hay, but it is coarse and of rather poor quality. Per bushel of 36 pounds, \$1.35; per hundred pounds, \$3.00.

Black Voronezh Millet. This is a variety of broom corn millet imported by the U. S. Department of Agriculture in 1898. In comparison with Red Russian, Early Fortune and many other importations of broom corn or hog millets it outranks them all in yield at both Highmore and Brookings. It has given an excellent account of itself. So far as our records show where it has been distributed throughout South Dakota it has given remarkable yields of seed. This millet is not used for hay but is grown only as a seed crop and is used to feed chickens and hogs. We do not recommend it for very moist localities for it succeeds much better under drier conditions. On moist land it is often injured by weeds as it is not in any sense a weed destroyer. On dry land, however, either on new breaking or old ground, it yields all the way from 20 to 50 bushels per acre of very valuable grain. Prices same as for Kursk millet.

HEADS OF MILLET
Black Voronezh at the Top, Kursk
and German Millet Below.

BUCKWHEAT

More Buckwheat has been grown in the west the past few years than heretofore. The springs of 1908 and 1909 were unusually wet so that much of the land could not be sown to the common crops in proper season. Much of this land was put into buckwheat. So far as we have been able to determine the yields have been very satisfactory. Buckwheat may be used as a catch crop to sow late in the season or it may be used to turn under to improve the condition of the soil.

Japanese Buckwheat. In most localities this is considered the most productive and best variety of buckwheat. The grain is dark brown, large and has sharp corners.

Silver Hull Buckwheat. An older variety than the Japanese and a great improvement over the common kind of buckwheat. The grain is gray in color instead of brown and has a more rounded form instead of angular like the Japanese.

We can furnish good seed of either variety at 60 cents per peck; \$1.75 per bushel; 5 bushels or over at \$1.50 per bushel.

QUALITY IN GRASS AND CLOVER SEED

DON'T BUY SEEDS WITH YOUR EYES SHUT.

It is an undeniable fact that most farmers purchase their grass and clover seeds with their eyes shut. I don't mean exactly this, but it amounts to the same thing. When one buys wheat, oats, and barley, it is a comparatively easy matter to determine impurities and it is a comparatively simple matter to make a germination test to find out what per cent. will grow. In grass and clover seeds the situation is different, particularly with grass seed. The buyer, nine cases out of ten has to take the seedsman's word for the quality of the seed that he is buying. It takes an expert to determine difference in quality in many of our kinds of grass seed by examination and even then he cannot by a mere examination tell the percentage that will grow.

USE THE GOVERNMENT SEED LABORATORIES, THAT'S WHAT THEY ARE FOR.

We do not know of any way that we can impress this matter upon the buyer better than to request him to purchase the seeds that he is to use early in the season, a month or two at least before he intends to sow them and then send a sample to the U. S. Department of Agriculture Seed Testing Laboratory for examination. In order that western farmers may secure tests in a short time, the Department of Agriculture has established a seed testing laboratory in connection with the Agricultural Experiment Station at Columbia, Missouri. This laboratory will test without charge samples of seeds sent to them for examination. The larger the sample sent the more accurate the test. It should be wrapped securely in a strong envelope and mailed to **Branch Seed Laboratory, Agricultural Experiment Station, Columbia, Missouri**. The sender's name and address should be on the outside of every package and a letter should be written, stating whether purity or germination tests are desired, or both.

A COMPARISON OF VALUES.

The way some growers compare values in seeds reminds me of the old-time farmer with his team made up of a colt and hardened work horse. The colt could pull only about half the load that the horse could handle so he gave the colt an inch or at most two inches advantage on the eveners thus really forcing the colt to pull almost half the load. The farmer of today would apply his mathematics to the problem and apportion the eveners in proportion to the pulling powers of the horses that is one-third the length of the eveners on the side of the horse and two-thirds on the colt's side.

The same line of reasoning applies to computing values in grass and clover seeds. Don't take off just a little in price because one stock is poorer than another but apply your mathematics. For example last year we had a large stock of Kentucky Blue grass on hand which tested 91% pure and showed a germination test of 83%. Now what does this mean? It means that 91% of seed was Kentucky Blue grass and that 83% of this 91% would grow. By computation we find then that just about 75% of the total weight was germinating seed. For Kentucky Blue grass this a very good test, both as to purity and germination. Another sample which looked so near like the sample we had in stock that it would take an expert to tell any difference, gave the following result in test. The purity examination showed that only 65% of the seed was Kentucky Blue Grass seed, the germination test showed that 58% of the Kentucky Blue grass seed that was present would grow. By computation we find then that 37 or 38% of the entire stock was good seed. What does this mean? This means that assuming that the impurities in either stock were harmless, which in the latter case would probably not be true, but assuming this to be true, one could afford to pay for the latter stock just half what he could afford to pay for the former. That is if the former was offered at 40 cents per pound, the latter would be worth about 20 cents. The actual difference in price of these stocks at the time they were offered to us was only two or three cents.

DIAMOND BRAND TRADE MARK

SOW ONLY CLEAN SEED.

Noxious weeds are a curse to any crop and particularly to grass and clover crops. Farmers are just beginning to realize the importance of sowing clean seed.

We have just installed at great expense one of the best cleaning outfits for the cleaning of alfalfa and clover seed in the Northwest. Heretofore we have been forced to apologize for the presence of foxtail in some of our alfalfa and clover seed because our regular cleaning machinery would not remove it. The equipment we have just installed has for its principal object the removal of this seed. A large percentage of Dakota grown alfalfa and clover contains foxtail and we are pleased to know that from now on it can be removed from the seed we offer for sale. Buy our "Diamond" brand and you will get seed that is right.

OUR "DIAMOND" BRAND

Our Diamond brand seeds represent the choicest, purest, cleanest, brightest, highest vitality and best seeds that can be obtained anywhere at any price. In order to secure and sell the Diamond brand it is necessary for us to handle other grades not quite equal to the Diamond. These will all be good seeds and well worth the price but they will not be equal to the Diamond brand. We guarantee seeds sold under the Diamond brand.

GRASSES

LAWN GRASS.

A good lawn is one of the most attractive features of the home. The first requisite of a good lawn is the right kind of seed. Aside from the importance of sowing good seed the most essential thing is to prepare the soil very thoroughly before the seed is sown.

The most desirable seed for a lawn anywhere in the western and central states is Kentucky Blue Grass. White Clover produces quicker results and is very desirable in a mixture with Kentucky Blue Grass. Aside from these two plants there are comparatively few kinds that are used for a lawn.

Before seeding the lawn, the ground should be well spaded or worked up in some manner to the very finest state of tilth. If in scraping or grading small areas of subsoil are uncovered, these should be removed for a few inches and black soil added. If this is not done the lawn will appear patchy and these spots will always be noticed. When the seed is sown, the soil should be well firmed and not allowed to remain loose. For lawn purposes a large amount of seed is sown. The quantity of seed is the smallest item and quicker results are obtained with a heavy seeding. From 40 to 100 pounds per acre is used.

Our Diamond mixture contains the choicest varieties known. This mixture is adapted to a variety of conditions. If however, you have unusual conditions we will make up a mixture for your special location, if you will give us a statement of such conditions. Price of our Diamond Lawn Grass mixture, per pound postpaid, 45 cents. By express or freight, 5 lbs. \$1.75; 10 lbs., \$3.40; 25 lbs., \$8.00.

KENTUCKY BLUE GRASS

This will always be the standard lawn grass and is also valuable to use in pasture mixtures where there is a reasonable amount of moisture. We offer only Diamond brand seed. Kentucky Blue Grass seed of poor or uncertain quality can be bought at a much lower price than we charge for our Diamond brand. We purchase the very choicest seed obtainable regardless of price. Prices per pound postpaid, 45 cents; by express or freight 5 lbs., \$1.85; 10 lbs., \$3.50; 25 lbs., or over at 34 cents per pound.

Russian Brome Grass (*Bromus inermis*) Showing Two Types of Plants

TIMOTHY.

This is still the leading grass. There is probably more acreage of timothy grown each year than any other one kind of grass in this section of the country. It is comparatively easy to procure a stand of timothy and it is usually reasonable in price. The season of 1910 was very unfavorable for the production of timothy. The supply of good seed is shorter than it has been for years and prices are consequently higher. Our seed is practically all South Dakota grown and we guarantee it for purity, quality and germination. We offer seeds in two grades as follows: Diamond brand, per hundred pounds \$20.00; small amounts at 25 cents per pound; Emerald brand per hundred pounds \$18.50; small amounts at 22 cents per pound. Single pound postpaid 25 cents. Prices subject to change.

RUSSIAN BROME GRASS.

All farmers who have grown this grass have a great deal to say about it. Sometimes their say is one way and sometimes the other. Anyone who has grown it either likes or dislikes it. We think that it has more of a place in the northern part of South Dakota and North Dakota than in the southern part, though there are advocates of *Bromus* almost everywhere you go. Price per pound postpaid, 25 cents; by express or freight, 20 pounds \$2.50; 100 pounds or more at 11 cents per pound. Prices subject to change.

FREE

With every order for grass, clover or alfalfa seeds at catalog prices to the amount of \$25.00 or over we will send our Improved Cyclone Seeder free upon request. Only one will be sent as a premium to any one customer however large the order. It will not be sent unless you ask for it. See description page 73.

We got one peck of California Russets last spring and got 3 twine sacks of potatoes out of it. I think your seeds are just right.

Fred Lammerr, Bemis, S. D.

CLOVERS

A CHEAP FERTILIZER.

The clovers belong to the group of plants known as legumes which serve to increase the nitrogen in our soils. This is done by certain bacteria which grow and develop on the roots of the leguminous plants. Every rotation of crops on the farm should include clover or some other plant of this family. The eastern farmers have come to realize this and consider clover absolutely necessary on their farms. The central states and west are gradually waking up to the fact that clover is just as desirable for them as for the eastern farmers. They may be able to get along without such crops for a while now when land is new but they will need more later and the use of clover now will increase the yields of other crops to pay for all expense attached and some additional. In experiments conducted by the Minnesota Experiment Station at various points in the State of Minnesota it has been shown that the sowing of six pounds of clover seed on every acre of ground that was put into wheat increased the yield of wheat the next year on an average of over three bushels per acre. This is getting good pay for the clover seed even at the high prices that sometimes prevail and shows that it pays even though the land is not left in clover for two or more seasons. We would advise that a certain portion of every farm be kept in clover but if this cannot be done, wherever small grain is sown the practice mentioned above of sowing clover seed with the grain and allowing the clover to grow after the grain is harvested to plow under for the next crop is far better than sowing the grain alone.

Nodules on Roots of Medium Red Clover

SOW ONLY NORTHERN GROWN SEED.

The writer has tested over fifty stocks of red clover seed in South Dakota and has found that seed from northern sources has proved in all cases to be the most desirable for the northern states. In fact no southern grown stocks tried were nearly as good as the northern grown seed. This point is of vital importance to clover growers in the Northwest. One can better afford to pay double the price for seed than to buy southern seed. In most cases western grown seed has proved better than eastern grown, though this is not always the case.

PRICES SUBJECT TO CHANGE.

THOSE QUOTED BELOW ARE BASED ON PRESENT MARKET.

Medium Red Clover. This is the common kind of red clover. Used alone or with timothy or in other grass mixtures. With our present increased facilities for cleaning we can offer the very highest grade of seed brought up strictly to our Diamond standard. We handle only northern grown seed. Prices subject to change. Diamond, bushel \$15.00; hundred pounds \$25.00. Emerald, bushel \$14.25; hundred pounds \$23.50.

Mammoth Red Clover. Ten days or two weeks later than the Medium clover and not so commonly grown. We cannot always furnish South Dakota grown seed of this clover, but will offer the best seed obtainable at prices governed by the condition of the market.

Alsike Clover. Often used in place of medium clover especially in wet places. One of the best clovers to use with timothy. Longer-lived than medium clover. Diamond brand, bushel \$14.25; hundred pounds \$23.50.

White or Dutch Clover. Used in lawns and pastures. Diamond brand, pound postpaid 50 cents; by express or freight, pound 40 cts; 20 lbs., \$7.25.

Alsike and Timothy Mixed. We will be pleased to mail samples and quote prices on these in varying proportions at any time.

You send the most seed for the money and just as good.

Mrs. Louese Acton, Shelby, Mont.

Your seed gave good general satisfaction.

J. Schnaidt, Jr., Menno, S. D.

SEE OFFER OF FREE SEEDER ON PAGE 33

MAMMOTH LONG RED MANGELS.

FIELD ROOT CROPS

The American people pay altogether too little attention to the growing of root crops for their stock. Roots occupy a position in both crop rotation and feeding rations that cannot be taken up by any other crops.

MANGEL-WURZEL.

Golden Tankard. Yellow in color; flesh is solid and firm. Extremely productive and valued highly by all dairymen and other feeders as a field root crop.

Mammoth Long Red. Roots are very large; deep red in color; very productive and very popular. This has given remarkable yields in South Dakota.

Giant Yellow Intermediate. A variety intermediate between the long and the globe shaped varieties. Flesh white, firm and solid.

Any variety by mail postpaid; oz. 5 cts.; lb., 50 cts. By express or freight; Lb. 40 cts.; five lbs. \$1.50; 25 lbs. \$7.00.

SUGAR BEETS.

Vilmorin's Improved. This variety has been developed through continued selections made by the famous seedsmen of France, and represents the best that can be obtained in sugar beet varieties at the present time. Prices same as for Mangel-Wurzel.

CARROT.

Mastodon: This is the heaviest yielding carrot grown, yielding a greater weight of roots per acre than any other sort. The flesh is white solid and sweet. It is a vast improvement over the older white and green Belgian sorts which are usually grown. The roots are short making them easy to harvest.

Victoria. A very large fine stock carrot. This is the best and heaviest yielding yellow carrot that we know of. It appears to be a heavy cropper on all kinds of soil but is especially adapted to rich, strong land.

Either variety: oz. 10 cts.; $\frac{1}{4}$ lb., 30 cts.; lb., 90 cts.; postpaid. By express or freight lb. 80 cts.; 5 lbs., \$3.75; 10 lbs., \$7.00.

RUTABAGA.

Monarch. The best and highest yielding rutabaga grown. It usually yields from two to 5 tons more to the acre than any other variety. We can recommend it very highly to all stockmen.

Purple Top Yellow. This does not give the immense yield per acre that is produced by the Monarch rutabaga, but besides being used for stock feeding it is suitable for table use as well. Roots grow to a large size, and are of fine quality.

Golden Globe. Very similar to the Purple Top Yellow, except for the color of the crown which is green instead of purple. An excellent variety and a good yielder.

Either variety: Oz. 10 cts.; $\frac{1}{4}$ lb., 20 cts.; lb., 50 cts.; postpaid. By express or freight: Lb. 40 cts.; 5 lbs., \$1.75; 10 lbs., \$3.25.

IMPROVED ROSE NO. 4 POTATOES

POTATOES

Shipping Potatoes. On all orders for potatoes of one bushel or over unless otherwise instructed, the potatoes will be shipped in baskets, one bushel to a basket. It takes a $1\frac{1}{2}$ bushel basket to hold one bushel of potato tubers. Baskets are much more expensive than sacks, but will carry the potatoes in much better shape. If the customer wishes us to use sacks in place of baskets, he may deduct 20 cents per bushel from the prices quoted here.

As to the time of shipping, we will exercise our own judgment as to when it is safe to ship unless we receive definite instructions from the purchaser. In such cases the purchaser assumes the entire responsibility as to freezing on the road.

Prices. It may appear that our prices on potatoes are high, but we shall try to have our potatoes very thoroughly handpicked so that only the right kind of tubers are sent for planting.

Early Ohio. The standard early variety and one that is hard to beat in the Dakotas. Peck, 60 cents; bushel in basket, \$1.75.

Improved Rose No. 4. Good quality, large, heavy yielder. One of the best medium late varieties we have tried. Peck, 60 cents; bushel in basket, \$1.75.

Vermont Gold Coin. A medium late white potato of excellent quality. This and the Improved Rose No. 4 are the heaviest yielders we know of in the Northwest. We have tried many others but these have topped the list under all conditions. Peck, 60 cents; bushel in basket, \$1.75.

POTATO EYES BY MAIL

160 POTATO EYES OF 1 TO 3 VARIETIES POSTPAID FOR \$1.00.

A great many farmers and gardeners in the northwest wish to try different varieties of potatoes in the attempt to get something better for their conditions than what they already have. There is a great difficulty in shipping potato tubers a long distance and the freight amounts to quite an item. To meet the demands under these conditions we will put up potato eyes in boxes to go by mail. We especially recommend this method where one cannot easily secure whole tubers for planting. It is particularly suitable for long distance shipments. We will put up 40 potato eyes of one variety in each small box. 4 small boxes make a large box containing 160 eyes. We can make this up all of one variety or of two or three varieties just as the buyer may wish. We will ship one of these large boxes containing 160 eyes to any person postpaid for \$1.00. We will ship these about the time we think they should be planted unless we are otherwise instructed. We prefer to have the buyer let us know when he wishes the potato eyes shipped, then there will be no misunderstanding.

FORMULA FOR SPRAYING POTATOES.

From E. R. Myers, Hopewell, S. D.

Mix 2 quarts flour, 4 quarts air-slaked lime and one pound Paris Green. Mix this with a little water and finally thin it to a bucket full, then pour into a barrel containing 30 gallons of water. Put it on with a sprayer or with a brush broom from a pail. Keep it well stirred. This will stick to the vines and kill the bugs. Ten gallons more water may be added as you get toward the bottom. It requires about three barrels to an acre.

FLOWERS

One of the most cherished recollections that we have of our mother's or grandmother's home is that of the beautiful array of brilliantly colored flowers—marigolds, daisies, pansies, balsams, asters, pinks, poppies, nasturtiums, and other flowers in great array. No harm was done if a few flowers were plucked for a table bouquet. There were always plenty left. Instead of being confined to a few small beds on the lawn they were planted in the open gardens with the vegetables and served to add color and life to the whole place.

This is as it should be. If you have no room for flowers anywhere else plant them among your peas, beans and sweet corn. They will have more room to grow and will do far better than they will in the cramped space by the front doorstep usually given to the flowers.

Our list of flowers is not large but let us assure you that it is as carefully selected for quality and hardiness as though it took up the whole book. We list only the very best strains. Quality in flower seeds is not always determined by the number of fancy colored pictures that are shown in the catalog.

ASTERS

AGERATUM. One of the best summer blooming plants grown from seeds. **Dwarf Blue Perfection.** Plant 9 inches high; flowers deep blue, 10 cents. **Imperial Dwarf White.** Plant 6 inches high; fine for borders, 10 cents.

ALYSSUM. One of the earliest grown summer bloomers. - Fine for edgings. **Common Sweet Alyssum,** 5 cents. **Little Gem.** - Extra fine, dwarf, 10 cents.

ANTIRRHINUM. **Snap Dragon.** Easily raised from seed in sunny locations. **Special Mixture** of giant flower sorts. The very best obtainable, 10 cents.

ASTERS. Beautiful for bedding or cut flowers. **Queen of the Market.** The best early sort. Includes many colors, 10 cents. **Giant Comet.** A handsome tall, large flowering sort, 10 cents. **Paeony-flowered Perfection.** Flowers very double, large, borne on long stems, 10 cents. **Finest Dwarf Mixed.** An extra choice mixture of dwarf varieties, 10 cents.

BALSAMS. Will grow under almost any conditions. **Double Camellia-flowered.** Very fine, 5 cents. **Finest Dwarf Mixed,** 5 cents.

CANDYTUFT. A beautiful annual bedding and border plant. Sow in open ground. **Giant Hyacinth-flowered White.** An improved strain far superior to the ordinary kind, 10 cents. **Choice Mixed.** All sorts and colors, 5 cents.

CARNATION, DWARF MARGUERITE. Blooms in a few months from seed. Transplant into beds or borders, 10 cents.

CENTAUREA. Very well known. Excellent for cut flowers. **Bachelor's Button Mixed.** 5 cents. **Sweet Sultan (C. imperialis).** One of the finest for cut flowers. Very easily grown. **Mixed colors,** 10 cents.

CYPRESS VINE. A fine but not rank climber. Flowers red and white. Leaves finely cut. **Choice Mixed,** 5 cents.

COSMOS. Very popular for cut flowers. Grows and blooms with the greatest freedom. **Early-flowering Hybrids Mixed,** 10 cents.

DAHLIA. Can be raised from seed and will bloom the first year. **Best Mixture of Double Varieties,** 15 cents. **Single Giant Perfection Mixed,** 10 cents.

DAISY. **Shasta Daisy,** one of the finest new perennials for herbaceous borders and also for cut flowers. Hardy anywhere in this latitude with very slight protection. Produces strong plants first year from seed, 10 cents.

DIANTHUS PINKS. Presents one of the richest arrays of colors of any garden plant. **Choicest Single Mixed,** 5 cents. **Choicest double mixed,** 5 cents. **Single fringed,** 5 cents.

ESCHSCHOLTZIA or CALIFORNIA POPPY. Will grow and bloom under all conditions. A very good bedding plant. **Golden West,** very fine, 10 cents. **Mixed,** 5 cents.

FOUR O'CLOCK. An old-fashioned but very popular bedding plant, 5 cents.

HOLLYHOCKS

POPPY. Flowers brilliant and showy. Very easily grown by sowing seed in the open ground. A striking display can be had with little work. **Special single mixed**, 5 cents. **Special double mixed**, 5 cents. **Dwarf Shirley delicate shades**, 5 cents. **Mixture of all kinds**, 5 cents.

PORTULACA OR ROSE MOSS. Grows well under most conditions but like its cousin the Purslane does best in warm weather. Used for edgings. **Single mixed**, 5 cents. **Double mixed**, produces a good proportion of double flowers, 10 cents.

RICINUS OR CASTOR OIL BEAN. A large and beautiful tropical plant. Makes a fine showing among shrubbery or in clumps. **Mixed**, 5 cents. **Zanzibarensis**, the largest and most magnificent variety, 10 cents.

FOXGLOVE. Particularly desirable for borders and among shrubbery. Blooms the second season. **Monstrosa**, very large and fine, 10 cents. **Gloxinia-flowered**, 5 cents.

GOURDS. Rank-growing ornamental climbers. **Mixed**, 5 cents.

HOLLYHOCK. When grown in the right place there is no plant that can add more to the appearance of a yard. **Finest single**, 5 cents. **Prize Mixture** of all the finest named double varieties, 10 cents.

LARKSPUR. Suitable for borders and for cut flowers. **Double Dwarf Rocket**, 5 cents. **Double Tall Rocket**, 5 cents.

MARIGOLDS. 1d favorite free flowering annuals of easy culture. **Special Tall Mixed.** Includes the finest named tall varieties in grand mixture, 10 cents. **Special Dwarf Mixed**, 10 cents.

MIGNONETTE. One of the most fragrant of garden flowers. **Golden Machett**, very fine, 10 cents. **Goliath**, enormous spikes of flowers, 10 cents. **Giant Pyramidal**, a very good strain, 5 cents.

MORNING GLORY. Popular strong growing climbers. **All colors mixed**, 5 cents. **Imperial Japanese.** Flowers of extraordinary beauty, 10 cents.

NASTURTIUMS. No other annual will produce such a lavish profusion of flowers for so long a time with so little attention. **Finest dwarf mixed**, pkt., 5 cents; oz. 10 cents. **Tall mixed**, pkt., 5 cents; oz., 10 cents.

PANSIES. When sown in summer or fall and protected during winter produces the most beautiful array of flowers in early spring. The largest flowers are produced in cool weather. **Imperial German mixed**, 5 cents. **Diamond mixture of finest sorts**, 10 cents. **Separate colors**, white, yellow, blue, black or red; 5 cents each.

PETUNIA. Once started grow like weeds from early summer until frost. **Finest mixed**, 5 cents. **Special Dwarf Mixture.** Made up from 6 of the finest small-flowered dwarf sorts. Nothing better for a brilliant bedding effect, 15 cents.

PHLOX. One of the best bedding plants. A great variety of colors. **Large-flowered mixture**, 5 cents. **Dwarf**, 6 to 8 inches high, for edging, 5 cents.

SUNFLOWER. very desirable for fence-rows, hedges or borders. **Miniature Sunflower** 3 feet tall produces an abundance of single flowers, 10 cents. **Double Chrysanthemum-flowered**, 5 cents.

VERBINA. A beautiful spreading plant for bedding or cut flowers. Our seed is the very choicest obtainable. **Mammoth white**, 5 cents. **Mammoth pink**, 5 cents. **Mammoth mixed**, all colors, 5 cents.

ZINNIAS. A showy bedding plant. Very desirable with shrubbery or in borders. Easily grown. **Finest double mixed**, 5 cents. **Double dwarf mixed**, 5 cents.

PANSIES

SWEET PEAS

No more popular flower is grown than the sweet pea either for display in the garden or for cut flowers. They are very easily grown if a few general directions are followed. They should be sown very early in the spring and the seeds should be placed several inches deep in the ground and covered gradually. The planting of sweet peas late in the season and only an inch deep is the cause of a large number of failures. We are not listing separate named varieties, but the Diamond mixture we offer is made up of the best named varieties we can secure, ranging in color from a very dark maroon to light pink and white. This mixture has given marked satisfaction wherever it has been tried during the past two years. We can recommend it for general planting.

Diamond Mixture. Per ounce 10 cents, $\frac{1}{4}$ pound 25 cents, pound 60 cents postpaid.

Countess Spencer Mixed. The flowers of the Spencer type of sweet peas are of unusually large size and beautifully crumpled or waved. These are rapidly gaining in public favor and deserve to occupy a very important place in every flower garden. As the plants are shy seeders the seed will always be more expensive than the common type. Per ounce, 20 cents, $\frac{1}{4}$ pound, 50 cents, postpaid.

GLADIOLUS

The improvement that has been made in the gladiolus during the past 15 or 20 years is very remarkable. The old-fashioned small red or yellow flowers have become a thing of the past and we now have a magnificent array of colors, and flowers that are three or four times the size of the old common gladiolus. Almost every color in the rainbow is represented in the newer varieties.

We do not wish to offer any kinds of flowers that are not of the simplest culture, but the gladiolus is one of the easiest grown flowers that we raise in our gardens. No extra care is required to produce the finest flowers. Every bulb that we offer is capable of producing a large spike of beautiful flowers the first season. They are not the small bulbs that require two years growth before blooming but every one of them is an extra large blooming size bulb. Everyone should try at least a dozen in their flower garden this year. With gladiolus one does not have to secure new bulbs every year. When you once get a start they will increase every year so that you will have two or three times as many bulbs each year than you had before. All that is required is to take them up when the stalks have dried down to the ground in the fall and store them in a cool dry place over winter.

Diamond Mixture. This includes one of the best array of colors that we know of. Hardly any two will be alike. They range from the deep red shades to light yellow and pure white. The bulbs are all of blooming size. Price 35 cents per dozen, 40 bulbs for \$1.00.

VEGETABLES

The same careful selection and cultivation of varieties especially adapted to soil and climatic conditions of the Northwest prevails in our vegetable seed business as in the field crops. We sell only the choicest, cleanest and most fertile seeds possible to produce and you may rest assured of best results if you select your garden seeds from the following pages.

OUR IMPROVED METHOD OF PACKING AND MARKING

Our seed packets are unique. They do not show fancy colored pictures of the kind of vegetable supposed to grow from the seed contained, made up according to the artists imagination, but they do give more information about the seed contained than is found on any other packets of vegetable seeds offered today. We believe that it is due to the buyer to know something about the seeds he purchases so we have inaugurated this "new seed packet." The securing of full information about each stock necessitates considerable additional expense and labor and makes our seeds cost more than others on the market but we think they are worth it. However, we are offering our seeds at prices as low or lower than many others who do not furnish this information and make no sort of guarantee on their seeds. This is worth thinking about.

A VALUABLE PAMPHLET ON VEGETABLE GROWING FREE WITH EACH ORDER

While this is a plain, simple pamphlet printed on common paper, it is invaluable to growers of vegetables for home use.

It contains full cultural directions for the various vegetables, written in easily understandable language. In addition it contains an alphabetically arranged table which shows you instantly how much seed is required for a given space, how far apart to put the plants in the row, how far apart to put the rows and how long is required for maturing of crop from seed.

SPECIAL PRICES TO MARKET GARDENERS.

Those who make a business of raising vegetables for market and require large quantities of seeds are entitled to lower prices owing to the great expense of measuring and putting up seeds in small packages. We publish a market gardener's price list which we will be pleased to mail to market gardeners or other large buyers on request. If you use a large amount of seeds we would advise your sending for this price list before ordering.

DON'T FORGET.

That Prof. Green's book "Vegetable Gardening" will give you all the information you need to grow a good garden to furnish vegetables either for home use or market. Just what you need to tide you over the difficult places. A practical book for a practical man. The results of 30 years experience and investigation. Nothing better. Sent postpaid to you for \$1.00. Order today so as to have it when you need it.

Your flax was the cleanest I ever saw and did fine. I am very well pleased with your seeds and the prompt and careful shipments you have always made.

J. W. Jones, Stickney, S. D.

DON'T FAIL TO ORDER

Wheeler's Model Garden Collection

30 Choice
Varieties
\$1.00

Regular Value
\$2.00

One Dollar Buys Seeds for a Complete Home Garden

EVERYONE who intends to raise a garden should order at least one of these collections. This special assortment includes almost everything that will be needed to supply the average family with vegetables all the year round. These are our very choices varieties—30 in all—the same quality you buy at regular prices, but by packing a large quantity of the same seeds at once, we can afford to sell for less. We also desire to introduce our improved vegetable seeds to all who have a garden, therefore as a special feature we offer these 30 choice varieties of

GUARANTEED SEEDS AT HALF-PRICE

Don't overlook Wheeler's Model Garden Collection when making out your order. Complete list on inside of front cover.

ASPARAGUS

Culture. Sow the seeds thinly in rows one foot apart in May. Thin to three inches apart in the row. The one-year-old plants should be set 4 to 6 inches deep in rows. 18 inches to 3 feet apart and 12 inches apart in the row. The soil should be dug up thoroughly to as great a depth as possible with an abundance of well rotted manure worked in. Every fall a heavy dressing of manure should be applied and in the spring forked in deeply. Never cut too closely.

Conover's Colossal. This is the standard variety. It is the same as the famous French variety, Argenteuil. It is considered less liable to rust than most other varieties. Pkt. 5 cents; oz., 10 cts. ¼ lb., 25 cts., lb. 70 cts., postpaid.

BROCCOLI

Similar to cauliflower except in color, which is usually a brownish purple. It is supposed to be somewhat harder than cauliflower.

Culture. Same as cauliflower.

Purple Cape. The standard variety, forming close compact heads of a brownish purple color. Pkt., 5 cts., oz. 35 cents, postpaid.

BRUSSELS SPROUTS

The edible part of the plant consists of little sprouts or heads which form along the main stalk of the plant. It can be grown much the same as cabbage and is valuable as a winter vegetable.

Culture. Same as cabbage.

Improved Dwarf. A very good sort, producing many "small cabbages" of delicate flavor. Pkt. 5 cents. oz., 20 cts. postpaid.

BEANS

Owing to the large number of varieties of beans it is impracticable to list nearly all of the number. We have tried to include in this list most of the types that we consider best for Northwestern conditions. For early string beans the green podded bush varieties are usually grown. For general crop the wax varieties are preferred. The White Navy or Pea bean is the standard variety for field culture. It is well adapted to being grown in the Northwest, either on new or old ground.

Culture. Beans do not make any great demand on soil fertility. Not only will they grow on almost any soil but they tend to benefit rather than impoverish soil upon which they are grown. It is safe to plant them only after the danger of late frost is past. For extra early string beans, however, it is customary to plant a few earlier and run the risk of being frozen. Sow bush varieties in drills two or three inches apart in the row. Hoe well in dry weather to keep down the weeds. Sow every two weeks for succession.

Extra Early Red Valentine. A popular standard early, green-podded bunch bean. Bushes about fifteen inches high, productive, of round, fleshy pods of good flavor.

Giant Stringless Green Pod. An early green podded bean of fine quality. Pods are large round, straight and perfectly stringless. The best green-podded bunch bean for the home garden. Valuable for a succession of plantings. It continues in bearing and furnishes string beans throughout the season.

Pencil Pod Black Wax. One of the most productive and popular of the wax podded varieties. Pods round and deeply saddle-backed, six to seven inches long, light golden-yellow color.

Wardwell's Kidney Wax. A standard variety of strong, upright growth, early and very productive. Pods straight, flat, rich golden yellow in color and of good quality. This variety is so well and favorably known that it recommends itself to more general use.

Detroit Wax. One of the popular wax varieties having broad, flat pods and white seeds with dark brown markings about the eye. We consider this a valuable acquisition to our list.

Webber Wax. One of the earliest and most productive beans that we have tested. The plant does not tend to grow to vine but holds the pods well up which makes it desirable for both the home and the market garden. In some respects this bean resembles Wardwell's Kidney Wax bean, but it is earlier and the pods are rounder.

Henderson's Bush Lima. This is the bush selection of the small Sieva Lima. The bushes are very productive and the beans when young are of excellent flavor. Recommended for culture as a green shell bean in the latitude of the southern half of Minnesota and South Dakota. 1-3 pt., 15 cts.; pt., 30 cts.; qt., 55 cts., postpaid. By express or freight, qt. 40 cts.; pk. \$2.00.

Burpee's Bush Lima. The bush form of the large Lima bean. Very productive of large pods. Later than Henderson's Bush Lima. Not recommended for planting on a large scale much north of the southern boundary of Minnesota. 1-3 pt., 15 cts.; pt. 30 cts.; qt. 55 cts., postpaid. By express or freight, qt. 40 cts.; pk. \$2.00.

Siebert's Early Pole Lima. The earliest of the large Limas. In earliness and in the quality of the green beans it is far ahead of any of the other large pole Limas. The vines are very productive and the pods are of immense size. 1-3 pt., 15 cts.; pt. 30 cts.; qt., 55 cts., postpaid. By express or freight, qt. 40 cts.; pk., \$2.00.

White Navy or Pea Bean. The standard variety for field culture for dry shell beans. The beans are small, thin-skinned and of the finest quality. By express or freight, qt. 30 cts.; pk. \$1.25; bu. \$4.50.

Prices. Any variety except where noted. 1-3 pt. 10 cts.; pt. 25 cts.; qt. 45 cts., postpaid. By express or freight, qt. 30 cts.; pk. \$1.75. For prices on larger quantities, see Market Gardener's wholesale price list, which will be mailed to large buyers on request.

Your seeds have been very satisfactory the two years that I have bought of you.
C. R. Pendergast, Hettinger, N. D.

I like the Malakoff corn which I got of you very much. It was early and sweet.
Mrs M. L. Phelps Montrose S. D.

BEET

There is a vast difference in garden beets as well as in sugar beets and mangels in the quality and flavor. This is sometimes a difference in the variety and is sometimes due to difference of soil. In the following list we have taken those that we know have done well in the Northwest. Our stock of seed is obtained from the best French growers.

Culture: Sow as soon as the ground can be worked in the spring for an early crop, and from ten days to two weeks later for general planting.

One or two plantings of the same variety or one planting of an early and a late variety will supply fresh beets for the entire season for they can be eaten from the time they are an inch in diameter until they mature. Sow in drills 16 inches to 2 feet apart for the garden varieties, and 18 inches to 2½ feet for the field or stock beets. If desired for garden use they may be sown very thickly and thinned out as needed for the table. Plants should be left about 4 inches apart in the row. Some of the table beets are occasionally grown for stock use, but the mangels give so much larger yields that they are more generally used. It requires about 5 to 8 pounds of seed to plant an acre of field varieties.

Crimson Globe. A very good, early and main-crop variety, of globular shape, deep crimson color, fine quality and handsome appearance.

Crosby's Egyptian. Extra early, dark red in color. An improved strain of the original Egyptian. There is no finer extra early beet offered.

Detroit Dark Red. An excellent main-crop garden beet. Noted for its small tops and upright growth. Roots globular, blood-red in color, remaining tender and sweet for a long time.

Eclipse. A popular early beet. Roots round, blood-red, foliage dark. Very productive.

Edmand's Blood Turnip. A valuable sort much grown by market gardeners because of its regular shape, early maturity, fine flavor and good qualities.

Any variety listed above, postpaid, 1-3 oz., 5 cts.; oz. 10 cts.; ¼ lb., 25 cents; lb. 90 cts. See "Field Root Crops" page 35 for Mangels and Sugar Beets.

CRIMSON GLOBE BEET.

CABBAGE

Culture: No soil can be too rich for the cabbage. Plant food in an available form is absolutely necessary for the production of good heads. The seed may be sown directly in the field or it may be sown in boxes or frames and transplanted to the garden or field. The latter is the more general practice because of less danger from the cut worms and flea beetles which trouble the young plants before they are able to take care of themselves. One-fourth pound of seed will ordinarily plant an acre. The small heading varieties such as Early Jersey Wakefield or Winnigstadt may be transplanted two or three feet apart each way, while the larger varieties require three to four feet. The earlier maturing varieties do better under prairie conditions because the cabbage likes a moist atmosphere. The large late varieties are very likely to be injured by the hot sun and the dry air of the later summer months. Light frosts do not injure cabbage at either end of the growing season provided they are properly nardened. When taken directly from the house or frame and transplanted they are very tender and are easily taken either by hard frost or by the various insects which attack them. To protect them from the attacks of the flea beetle the plants should be dusted with tobacco dust as often as necessary, but if the insects once become established it is hard to dislodge them.

Eureka or First Early. A very early cabbage having small round heads. In our trial grounds this produced 95 per cent of good heads. In bulletin 91 from the S. D. Agricultural College this is reported as the earliest out of 127 varieties and as heading 100 per cent.

Early Jersey Wakefield. The popular, first early cabbage. Heads cone-shaped, solid, with few outside leaves. Very desirable for home or market.

Charleston Wakefield. This variety is similar to Early Jersey Wakefield and is supposed to be about ten days later. In our trial grounds in 1908 and 1909 this variety was the best and surest heading early cabbage and proved to be just about as early as the Early Jersey Wakefield. Its superiority over all other early varieties of cabbage was clearly demonstrated. Pkt. of 300 seeds, 5 cts.; oz., 25 cts.; $\frac{1}{4}$ lb. 75 cts.; lb. \$1.95 postpaid.

Early Winningstadt. A very valuable early and general crop cabbage for the Northwest. It is very hardy and a sure header under very severe conditions. The heads are about the size and shape of the Early Jersey Wakefield and are very solid. They remain longer without breaking open than the Early Jersey Wakefield. Dr. T. H. Youngman, of Canon City, Colo., says: "The Early Winnigstadt all headed and were as hard as rocks."

Early Spring. The earliest, flat cabbage. Heads solid, six to eight inches in diameter and of fine flavor. In our trials in 1909 this was nearly as early as the Early Jersey Wakefield and the heads were about twice the size and weight.

Early Summer. A desirable second early, flat sort, producing solid heads of excellent quality.

Succession. An excellent second-early sort producing solid heads of good size.

Danish Ball Head. Our seed of this great variety is Danish grown from selected stock of the true tall-stemmed strain. This is distinguished from the Hollander or Dwarf Amager by the length of stem. The heads are round, very solid and of excellent market size. A fine winter keeper. Pkt. of 300 seeds, 5 cts.; oz. 25 cts.; $\frac{1}{4}$ lb. 75 cts.; lb. \$1.95 postpaid.

Hollander or Dutch Winter. Similar to the Danish Ball Head but shorter stemmed. Fine in quality, medium size and an excellent winter keeper. Largely grown in all cabbage growing districts. Pkt. 5 cts.; oz. 25 cts.; $\frac{1}{4}$ lb. 75 cts.; lb. \$1.95 postpaid.

Bridgeport Drumhead. A large late cabbage of firm texture and good shipping qualities. A valuable sort for general use.

Premium Flat Dutch. An improved strain of the old standard Flat Dutch introduced into this country by the early settlers. Not yet improved upon as a large late sort. In our trials in 1909 about 90 per cent of the plants developed good heads, many of which weighed from 12 to 15 pounds.

Any variety except where noted, Pkt. of about 300 seeds, 5 cts.; oz. 20 cts.; $\frac{1}{4}$ lb. 60 cts.; lb. \$1.75 postpaid.

DISCO SUMMER CABBAGE

This is one of the most remarkable cabbage introductions that has been brought to our notice for years. In general type and shape of head it resembles very much the well-known Danish Ball Head or the Hollander. It differs from these, however, in being extremely early. It is almost as early as the Early Jersey Wakefield but has heads 2 or 3 times as large as this well-known early cabbage. This is a

undoubtedly
its winter com
We recommend
oz., 55 cents;

tirely new introduction on account of its great merit will very soon become as prominent among early varieties as panion, the Danish Ball Head, is among the later sorts. this cabbage to every gardener for trial. Pkt. 15 cts.; $\frac{1}{4}$ lb., \$1.60; lb., \$5.50, postpaid.

CHARLESTON WAKEFIELD CABBAGE.

CARROT

Culture: Sow seed as soon as the ground is warm enough in drills 1 to 2 feet apart in the garden and 2 to 3 feet apart for field varieties. For field planting they may be sown late in May or early in June. Earlier seeding, however, is preferable. Careful, clean cultivation is required for if young plants are crowded at all with weeds they will be destroyed.

Danver's Half Long. A great favorite for all purposes. One of the best for stock feeding. Very productive on all soils. Roots large and of good quality.

Chantenay. A medium early carrot, about six inches long, stump-rooted, deep red or dark orange in color, fine grained and sweet. One of the finest in quality for the table.

Early Scarlet Horn. The popular early variety. Roots small, orange-red, smooth and fine grained.

Oxheart or Guerande. A short thick carrot, very blunt at the apex. Of very good quality for the table and a good yielder.

Any variety. 1-3 oz., 5 cts.; oz. 10 cts.; $\frac{1}{4}$ lb., 35 cts.; lb. \$1.00, postpaid. See "Field Root Crops" page 35 for stock carrots.

Danver's Half Long Carrot.

CAULIFLOWER

The cauliflower is not grown to so large an extent as its value would warrant among our vegetables. There are certain difficulties which present themselves, first of which is that the seed is rather expensive, and second it requires good care and attention to produce good heads. The two varieties which we list here are both very early and with good care will produce good heads in almost any season.

Earliest Dwarf Erfurt. One of the best and earliest varieties. Plants dwarf and compact with short stems and small leaves.

Early Snowball. In earliness, reliability in heading, general appearance and size of head this is unequalled. A very popular variety. Our stock of seed is from one of the most reliable Danish growers. We can recommend it for the most critical gardeners.

Either variety: Pk. 10 cts.; $\frac{1}{2}$ oz., 75 cts.; oz. \$1.25.

EARLY SNOWBALL CAULIFLOWER.

CELERY

Culture. Sow the seed in flats or frames and transplant to the open field. The usual method is to set the plants in rows 3 to 4 feet apart, but for the garden they are often grown in beds with the plants 6 to 8 inches apart each way. By the latter method an exceedingly rich soil and a large amount of water are necessary to support the large number of plants to a given area. When full grown the plants should be blanched by packing the earth up around them or by using boards.

Golden Self-Blanching. A very popular early variety, of dwarf, compact habit. One of the best in quality and comes nearest to being a truly self-blanching variety of any grown. We recommend this for general culture. Our seed is the choicest French Grown. Celery of this variety grown from our seed has taken the premium at most of the county fairs in our vicinity and has also taken first premium at the South Dakota State Fair for two years. Pkt. 10 cts.; Oz. 35 cts.; ¼ lb., 75 cts.; lb. \$2.00, postpaid.

White Plume. This is the earliest and one of the most easily blanched varieties grown. Extensively grown for market. Pkt. 5 cts.; oz., 20 cts.; ¼ lb. 50 cts.; lb., \$1.40, postpaid.

Kalamazoo. This is not a self-blanching variety but is one of the best of the general crop sorts where artificial blanching is resorted to. It is extremely large, solid and crisp. Pkt. of about 500 seeds, 10 cts.; oz. 40 cts.; ¼ lb. 85 cts.; lb. \$2.75 postpaid.

CUCUMBER

Culture: Sow in the open ground when danger of frost is past. Plant from 6 to 20 seeds in a hill and have the hills from 4 to 6 feet apart. The greatest pest of the young plant is the striped beetle which attacks them just as soon as they are out of the ground. In small gardens the most effective way to check the beetles is to cover the hills with mosquito netting held up with wooden frames. In large plantings, scatter dust, lime or ashes on the plants while wet with dew or use Paris green sprayed on the plants in very weak solution.

Improved Early White Spine. This was the earliest and most productive variety in our trial grounds in 1909. It is without an equal as an all around early and general crop

GOLDEN SELF-BLANCHING CELERY

for home or market. A vigorous grower and prolific cropper. Fruits are remarkably uniform in size, dark green in color and very handsome in appearance. One of the best varieties for slicing and forcing.

Arlington White Spine. One of the most popular of the White Spine sorts. Vines hardy and vigorous, producing fine uniform fruits about eight inches long, the cucumbers retaining their dark green color until well advanced towards the ripening stage. The flesh is white, very crisp and of excellent flavor.

Improved Long Green. An old and popular variety, producing large fruits, ten to twelve inches long. Flesh is solid, crisp and of

SEVERAL VARIETIES OF CUCUMBERS.

in length, slim, but uniform in size, dark green in color. Excellent flavor. Very highly esteemed for garden use.

Chicago Pickle. A medium-sized variety with prominent spines. A vigorous grower and a prolific producer. Highly esteemed as a pickle variety.

Cumberland. This variety of the white spine type is quite a favorite for pickling. Fruits at pickling stage are thickly set with spines, grow very straight, and uniform and are very dark green in color. Fruits attain a fair size and are good for both pickling and slicing.

Early Green Cluster. Fruit small, grows in clusters of two or three, very prolific, short, dark green.

Any variety: 1-3 oz., 5 cts.; oz., 10 cts.; ¼ lb., 30 cts.; lb., 90 cts., postpaid. By express or freight: Lb. 30 cts.

SWEET CORN

For a succession of crops we recommend the following varieties which are named in the order of maturity: Malakoff, Golden Bantam, Early Minnesota, Early Evergreen and Stowell's Evergreen. In the northern part of our territory the Malakoff and Golden Bantam are all that are needed to produce corn of the finest quality throughout the corn season.

Red Cory and Malakoff, Picked at Same Time to Show Comparative Earliness of the Two Varieties.

Culture: In general the culture of sweet corn is very much the same as field corn. Sweet Corn should not be sown until the soil is somewhat warmer than required for field corn as there is danger of its rotting in the ground. Small early varieties may be sown in drills $2\frac{1}{2}$ to 3 feet apart with the plants 6 to 8 inches apart in the rows. Later and larger varieties should be planted further apart, depending upon the size of the plant.

MALAKOFF SWEET CORN.

The earliest "sweet corn" known. Similar to the well-known Peep O'Day, but of better quality. The ears are very small and are borne in large numbers. Single stalks produce from 2 to 4 ears each. There are other varieties of corn as early, but none of them has the sweet and delicious flavor of the Malakoff. At the Universal Exposition at St. Louis in 1904, in the exhibit of the United States Department of Agriculture in the Government building a wax model of the Malakoff Sweet Corn was shown as the "earliest sweet corn." Our stock of Malakoff is very limited this year and we probably cannot secure more. When our supply is exhausted we will substitute with Peep O'Day unless otherwise instructed. 1-3 pt. 15 cts.; pt. 30 cts.; qt., 50 cts., postpaid. By express or freight, qt. 35 cts.; pk. \$1.75.

PEEP O'DAY SWEET CORN.

Similar to the Malakoff in both character of growth and season. This variety of sweet corn has been very extensively grown throughout the Northwest for several years and has become very popular. We can highly recommend it to critical growers. 1-3 pt. 10 cts.; pint 25 cts.; qt., 45 cents, postpaid. By express or freight, qt. 30 cts.; peck \$1.50.

Red Cory. The standard early corn. Compared with the Malakoff it is nearly, if not quite as early, has larger and more regular ears, but is not as sweet. A good early corn for market. 1-3 pt. 10 cts.; pt. 25 cts.; qt., 40 cts., postpaid. By express or freight, qt. 25 cts.; pk. \$1.25.

Early Minnesota. The old standard early or second early variety. Somewhat earlier than Crosby's Early and about a week or ten days later than Malakoff. Quality good, ears eight-rowed, of good size and very regular in form. Desirable for either home use or market. 1-3 pt. 10 cts.; pt. 25 cts.; qt. 25 cts.; pk. \$1.25.

Black Mexican. Early, very sweet and good. 1-3 pt. 10 cts.; pt. 25 cts.; qt. 45 cts.; postpaid. By express or freight, qt. 30 cts.; pk. \$1.25.

Early Evergreen. Season a week or ten days earlier than Stowell's Evergreen. This variety, because of its good quality and medium season, is one of the best general crop varieties for the northwest. 1-3 pt. 10 cts.; pt. 25 cts.; qt. 40 cts., postpaid. By express or freight, qt. 25 cts.; pk. \$1.25.

All the seeds we tested this year proved to be satisfactory in every way. The Icicle Radish and early peas in the garden collection were fine. Out of the Chili squash I got four and these are dandy. One of them beats your large squash 5 lbs.—it weighs just 108 lbs. We raised the Early Wakefield cabbage. The heads were solid and very fine.

John Mathews, Muscoda, Wis.

The few seeds that I ordered from you last year grew as well as could be expected for a dry year. Some of them did fine.

Mrs John Eife Spencer S D

GOLDEN BANTAM SWEET CORN.

An early variety, only a few days or a week later than Malakoff. The stalks are $3\frac{1}{2}$ to 4 feet high and average two ears to each stalk. When ready for use the grains are deep yellow and present a very attractive appearance served on the ear. It is without a rival in sweetness and richness of flavor. Very desirable for the home garden. On the market the yellow appearance may seem an objection until it becomes well known and then it serves to distinguish it from the more common white varieties. Everyone remarks when tasting Golden Bantam for the first time: "This is the best sweet corn I have ever eaten. It is delicious." 1-3 pt., 10 cts.; pt. 25 cts.; qt. 45 cts.; postpaid. By express or freight, qt. 30 cts.; pk. \$1.40.

Stowell's Evergreen. The standard general crop or late sweet corn. No other variety has been able to displace it either in the home or market garden. For size and appearance of ear, productiveness and sweetness there is none better. 1-3 pt. 10 cts.; pt. 25 cts.; qt. 40 cts.; postpaid. By express or freight, qt. 25 cts.; pk. \$1.25.

Country Gentleman. One of the sweetest late varieties in cultivation. Ears of large size; kernels long, pointed and arranged irregularly on the cob. 1-3 pt., 10 cts.; pt. 25 cts.; qt., 45 cts.; postpaid. By express or freight, qt., 30 cts.; pk. \$1.50.

POP CORN

There is no good reason why ever farmer should not have a good supply of pop corn for his family. As easily raised as field corn, and if you have more than you need for your own use it can always be sold on the market at a good price.

White Rice. The standard sort for field culture. Our stock is very fine and well selected. It is the best we have ever seen. Try some on your farm and you will not regret it.

Queen's Golden. One of the best varieties. Very productive. Pops into large flaky, white kernels of fine texture and creamy white.

Either variety: 1-3 pt. 10 cts.; pt. 25 cts., by mail postpaid. By express or freight, qt. 25 cts.; pk. \$1.25.

EGG PLANT

Culture: Sow in a hot bed very early in the spring. When the plants are two inches high transplant to another bed or set in pots. Plant in the open ground in June when the weather is settled.

Early Dwarf Purple. This is the earliest and one of the most productive varieties. The fruits are purple and average eight to ten ounces in weight. About the only variety that is sufficiently early to be grown in the Northwest. Pkt., 5 cts.; oz. 50 cts., postpaid.

ENDIVE

Culture: Sow the seed in June or July in drills one foot apart. Thin to eight inches in the row. When the leaves are six to eight inches high gather them up and tie lightly at the top. In two or three weeks the center leaves will be bleached, when the plant may be used.

White Curled. Adapted for early use; does not need blanching; the finest cut and curled, leaves being almost white. Pkt. 5 cts.; oz. 15 cts.; postpaid.

KALE or BORECOLE

A member of the cabbage family which does not form heads, but has variously colored leaves with fleshy leaf stems. The crop is little grown in our territory.

Culture: Same as Cabbage.

Curled Mosbach. A rather dwarf, compact sort with light green foliage. Pkt. 5 cts.; postpaid.

KOHL-RABI

Culture: Sow in the open in early May in rows 18 inches apart, later thin the plants to 8 inches. When the thickened roots are 2 inches through they are fit to eat and should be used before they become tough. Cooked the same as turnips.

Early White Vienna. The best sort for table use. Of fine appearance and very early. Pkt., 5 cts.; oz. 25 cts., postpaid.

Holden's Ideal Corn Tester is the only one that will separate the strong ears from the weak ears.

GOLDEN BANTAM

LETTUCE

The varieties which are listed here are those which are especially adapted for cold frames or outdoor culture. All of them can be recommended for this purpose, but we wish particularly to call attention to the May King, Grand Rapids, California Cream Butter and Prizehead. The old popular Prizehead is considered by many as very desirable, though the color and texture of the leaves are somewhat against it.

Culture: Seed can be sown almost any season of the year, though early spring is the most desirable time as a moist atmosphere is required for the best development. Sow the seed thickly in drills from 6 to 12 inches apart. For early use pick leaves directly from the plants. Later thin the plants in the row or transplant from 6 to 8 inches apart.

Grown this way they will develop heads or bunches which are much better in quality than those grown thickly in the row. Rapidity of growth is necessary to produce tender edible plants. Plenty of water and rich soil are of the greatest importance.

May King. One of the best varieties for spring planting forming large, round, solid heads very quickly in cool weather. The leaves are tender and of fine flavor. We know of none better as an early variety.

Grand Rapids. Character of growth similar to the Black-Seeded Simpson, from which it was developed by more than fifteen years' selection. To a large extent this variety has replaced the older Black-Seeded Simpson. It is often difficult to secure a good germination with the Grand Rapids. In spite of this fact it is the most popular variety we know of today. Everyone likes it.

Black Seeded Simpson. A crisp light-green, bunch lettuce. Leaves

broad, very much crumpled, twisted and frilled. Ranks as one of the four most largely planted varieties in the United States.

Morse. Similar to Black-Seeded Simpson except in color of seed, which is white.

California Cream Butter. One of the best summer varieties of head lettuce. Forms round, crisp, solid heads of very fine flavor. In our trials in 1910 this variety was not excelled by any other tried either in productiveness or quality.

Prizehead. Probably grown to a larger extent than any other variety in the United States, especially in the west. A large, early, bunch lettuce, brown in color, crisp, tender and of good flavor. Recommended for spring and early summer planting.

Hanson. A very large, late cabbage-heading variety; very crisp and firm in texture; quality sweet and good. This is the standard summer head lettuce and succeeds everywhere. Its popularity is attested by the fact that it has been listed by over two hundred seedsmen in this country and ranks as one of the three most largely grown varieties in the United States.

Iceberg. Similar to the Hanson except that it is smaller and is tinged with brown. The quality is good and very sweet. A newer variety than Hanson, but rapidly gaining in favor.

Any variety: 1-3 oz., 5 cts.; oz. 10 cts.; ¼ lb., 30 cts.; lb., 90 cts., postpaid.

CALIFORNIA CREAM BUTTER LETTUCE.

LEEK

Culture. Sow in early spring in drills later thin to one inch apart. When plants are six inches high set in rows twelve inches apart and rather deep, but leaving the young center leaves exposed. Draw earth up to them as they grow. Dig and store in earth in a cool cellar before winter.

Carentan. Standard variety with stout habit and dark colored leaves. Pkt. 5 cts., postpaid.

MAY KING LETTUCE

MELONS

The climate and soil of the Dakotas seem to be particularly adapted to the raising of melons. In the extreme north only the very early varieties should be planted. In central and southern South Dakota all the varieties listed here usually ripen satisfactorily in ordinary seasons.

Culture. Sow and cultivate same as cucumber. As the full season is usually required for development it is well to plant as early as the weather will permit. Watermelons require more room than cucumbers or muskmelons and will succeed on a sandier soil.

EATING KLECKLEY SWEET Grown on a Dakota Homestead. These products of Wheeler's Seeds Grown by H. A. Pritchard, give evidence of the possibilities of Tripp County.

MUSKMELONS

Rocky Ford. First introduced as Netted Gem, but now more commonly called Rocky Ford after the place in Colorado made famous by its melons. Fruits small, oblong or oval in shape, well ribbed and very heavily netted, the netting turning to a silver color when ripe. The skin is hard and firm, making it an excellent shipper. Flesh is green in color and of the best quality.

ROCKY FORD MUSKMELON

Extra Early Hackensack. The standard, very early variety and very popular for both home use and market. The melons are of fair size, nearly round in shape, flattened at stem and blossom ends; heavily ribbed and netted. Flesh green and of good flavor.

Early Green Nutmeg. Very early; flesh green; very sweet; of good flavor. This was the earliest variety in our trial grounds last year and bore well throughout the season. Valuable for both home use or market.

Any variety: 1-3 oz., 5 cts.; oz., 10 cts.; ¼ lb., 35 cts.; lb., \$1.20, postpaid.

WATERMELONS

Cole's Early. The earliest watermelon in cultivation. Can be grown in all the northern states. Valuable for both home and market use where larger varieties will not mature. A larger acreage of this melon is grown in the Northwest every year than of any other variety.

Fordhook Early. The earliest large fruited melon. Fruits of good size, green skin and red flesh. A good shipper. Recommended for planting in South Dakota and southern Minnesota.

Burrell's Gem. Another fine melon from Rocky Ford, Colorado, the home of the famous Rocky Ford Muskmelon. This variety is unsurpassed in quality and also for shipping. It has reddish orange flesh and small cavity. Melons weigh about 2 pounds each. Our seed comes direct from the originator.

Osage or Miller's Cream. Fruit medium size, oval. Flesh, deep salmon color and very thick. A great favorite among the market gardeners.

Emerald Gem. An extra early melon of small size, smooth, emerald green skin and thick salmon colored flesh. This is the richest flavored melon in cultivation. Valuable for the home garden on account of its earliness and fine quality.

WATERMELON PATCH of Mrs. Ross G. Moore, Tripp Co., South Dakota. It looks as though Tripp County would be a good place to visit about melon time.

Kleckly's Sweet. The sweetest of all watermelons. The fruits are very large in size and dark green in color. The flesh is bright scarlet and of a very fine texture. Not early enough for the extreme north but suitable for the latitude of Mitchell and south of this. Several carloads of these melons were grown near Mitchell by one grower the past season.

Long Light Icing A melon of extremely fine quality and very productive. This is one of the best general crop market varieties. It has been grown extensively in the vicinity of Mitchell for the past few years and has become very popular.

Peerless or Ice Cream. A very fine flavored melon for early home market. The fruit is medium sized, oval, bright green. The flesh is bright scarlet and very sweet.

Sweetheart. Rather late for our vicinity. A fine large melon. For market and shipping it is among the best and will remain in condition for use longer than most others. Any variety: 1-3 oz., 5 cts.; oz., 10 cts.; ¼ lb., 20 cts.; lb., 60 cts., postpaid.

ONION

There is no vegetable with which one should take more care in the selection of seed than the onion. Probably more poor onion seed is sold every year than of any other one crop. Our seed is grown by the best growers who make careful tests of all stocks for germination before we receive them. To make matters doubly sure we test all stocks for germination and growth after receiving them so you are sure to get seed that will grow and produce good onions.

Culture: No other crop responds to good care as the onion. For very early use the sets give the best returns. These should be planted 3 or 4 inches apart in rows one foot apart. For general crop, sow the seed as early as the ground can be worked in the spring in drills from 1 foot to 18 inches apart. Cultivate early and thoroughly, but do not cover the plants with soil when cultivating. Shallow cultivation is better than deep. A clean soil, plenty of water and thorough surface cultivation are necessary to raise a good crop.

Large Red Globe. By many this is considered the finest red sort. It is perfectly globular in shape and of large size. Skin is dark blood in color. It is a splendid keeper and the quality is excellent. In western markets this brings the highest price. For general crop either in the home garden or for market this variety should occupy the most prominent place.

**Have you ordered
Wheeler's Model
Garden Collection?
\$2.00 worth for \$1.00**

I think your catalog could not be improved much as it contains honest descriptions, and leaves out high colored pictures of vegetables and crops of something new to catch suckers. If you will continue to sell good seeds at an honest price you and those who sow them will prosper.

W. J. Kelly, Claremont, S. D.

I think you are fair and square in the business I have done with you for the last three years.

E. J. Kugler,

Alexandria, S. D.

I think your Model Garden Collection is ideal.

M. B. Trooper, Draper, S. D.

We have much better luck with your seeds than any we get at the store.

Mrs. G. A. Sterling,
Oshkosh, Nebr.

SOUTHPORT WHITE GLOBE ONION.

Large Red Wethersfield. This variety is the popular red onion usually found in all markets. It is medium early and is a very good keeper. It is probably the largest and hardest of the American varieties of onions. It will yield a good crop when many others will fail because of the unfavorable conditions.

Southport White Globe. A very beautiful, white onion. Though not as good a keeper as some of the red and yellow sorts, it is a very popular onion for early market. Pkt. 5 cts.; oz., 35 cts.; $\frac{1}{4}$ lb., 80 cts.; lb. \$2.50, postpaid.

Yellow Globe Danvers. This is the standard yellow globe onion seen in most of our markets. No other varieties seem to be able to displace it and its companion, the Large Red Wethersfield. Both are hardy, good croppers and excellent keepers and seldom fail to give good returns.

Prizetaker. This onion is of immense size, globular in shape, hard and firm. The skin is straw yellow in color and the flesh is fine-grained and of excellent flavor. A fairly good keeper, but not equal to the Red Wetherfield, Red Globe or Yellow Globe Danvers in this respect.

Mammoth Silver King. A large, white, Italian sort, with tender, white flesh. It grows quickly and matures rather early. It is one of the most striking onions in appearance and is valuable for marketing in autumn and early winter.

White Barletta. A very early white onion grown for early bunch onions and also for pickles.

Any variety, except the Southport White Globe: Pkt., 5 cts.; oz., 25 cts.; $\frac{1}{4}$ lb., 60 cts.; lb., \$1.85, postpaid.

ONION SETS

Very desirable for planting to secure very early onions for the table. A quart or two is sufficient for an ordinary sized family.

Bottom Sets. Red or yellow sets, per quart, 30 cts.; white sets, per quart, 35 cts., postpaid. Write for prices on larger quantities.

Top Sets. Per quart, 30 cts., postpaid.

OKRA or GUMBO

Culture: Sow in June in drills $2\frac{1}{2}$ feet apart. When the plants are up, thin to 10 inches in the row. The pods should be gathered before they become stringy. If the pods are kept gathered when young the plant will remain in bearing a longer time.

White Velvet. Produces large, round, smooth pods, velvety white in color. Pkt., 5 cts.; oz., 10 cts., postpaid.

PARSLEY

Culture: Sow the seed as early as desirable either in a cold frame or in the open ground. Soak the seed in warm water a few hours before sowing; have the soil thoroughly pulverized and pat it down lightly around the seed. Thin the plants to four inches in the row and cultivate same as carrots.

Moss-Curled. This variety is densely crumpled and curled and has dark green leaves. Pkt., 5 cts.; oz., 10 cts., postpaid.

I think your seeds are the best I ever had from any seedsman. I have bought from the east for twenty years or more. I like your painstaking way in doing business. Your testing and guarantee helps a gardener in many ways.

J. C. Ines, Luverne, Minn.

The seeds I bought of you all grew fine except some sweet corn and I think it was too dry for it to come up. I think your manner of doing business is all right.

T. R. Bement, Sioux Falls, S. D.

I like your catalog because it is large enough, no flaring pictures, frank, good quality paper, worth saving. I have it before me now and frequently use it as an encyclopedia.

W. B. Cox, Harding, S. D.

The seeds we purchased from you gave general satisfaction. The tomato seed grew exceptionally well. I think your manner of marking packets, etc., is O. K.

Boyd Fleming, Monango, N. D.

PARSNIP

More commonly grown in the home garden than for the market. If the roots are allowed to remain in the ground over winter they will fill in a very convenient place on the table in the spring when other vegetables are becoming scarce.

HOLLOW CROWN PARSNIP

Culture: Sow the seed as early in the spring as the ground can be worked in drills 12 to 18 inches apart. Have the ground thoroughly prepared by deep plowing and good cultivation before sowing the seed. The plants are somewhat slow in starting from seed, but when once started they are comparatively easy to care for and well repay the labor expended in growing them. The roots may be dug from the field in the fall or early spring.

Improved Guernsey. A heavy cropper; flesh fine-grained and of good quality. Roots are not so long as the Hollow Crown, but thicker and more easily gathered.

Hollow Crown. This is the standard market gardener's strain. It is very sweet and of good flavor.

Either variety: 1-3 oz., 5 cts.; oz. 10 cts.; ¼ lb., 20 cts.; lb., 60 cts., postpaid.

PEAS

The crop of seed peas for 1911 was almost a total failure. Good seed is extremely rare and prevailing prices very high. With many varieties it is almost impossible to secure satisfactory seed at any price. We will endeavor to do the very best possible for our customers. A great deal of substitution will probably have to be done on orders for peas this season. We hope you will help us as much as possible in our endeavors to supply you with seeds and state very clearly on the order whether you wish a substitution or money refunded should we not have the variety or varieties you wish. This will help us to better serve you along this line.

Culture: Make an early sowing of one of the early peas like Earliest of All and follow this very soon after with one of the early wrinkled sorts and one of the general crop sorts. Sow every week or ten days up to the first or middle of June. In this way one can have peas through the summer months. Sow in single or double rows 18 inches to 3 feet apart. For very early planting, place the seeds about one inch deep and have the later plantings from 2 to 4 inches deep. Place the seed 2 to 3 inches apart in the row. Cultivate thoroughly as soon as the peas are up and until the vines take up the space.

First and Best. This is the earliest and best strain of smooth white peas. Seeds are small, smooth and white. Vines are vigorous, about 2½ feet high and bear profusely of medium sized pods, each containing five to seven peas. 1-3 pt., 15 cts.; pint, 35 cts.; qt., 65 cts., postpaid. By express or freight, qt. 50 cts.; peck \$2.50.

Alaska or Earliest of All. This is one of the best early peas grown. It is very productive and matures the entire crop almost at one time so that it can be gathered in two pickings. It is of good quality for a very early pea. Prices same as for First and Best.

Surprise One of the earliest of all wrinkled peas. Pods are not so large as the American Wonder, but more numerous. This is not so well known as the older American Wonder, but is rapidly taking the place of the older variety.

Premium Gem. A very dwarf wrinkled pea. An old variety, but still in great demand. Nearly as early as American Wonder. Grown in nearly every private garden in the West.

Nott's Excelsior. Of the dwarf, early, wrinkled peas there is none better for general culture in the northwest than Nott's Excelsior. Pods average three inches in length and are well filled with very large peas of unusually good quality. Wherever this variety has been grown in South Dakota it has given the best of satisfaction, either for the home garden or for market.

Advancer. A wrinkled pea that is very popular with market gardeners because of its great productiveness. Grows 2 to 3 feet high.

Any variety except where noted: 1-3 pt., 15 cts.; pt. 40 cts.; qt. 75 cts., postpaid. By express or freight, qt., 60 cts.; pk., \$3.00.

Read "Corn Facts" by C. E. Twamley and learn from one who knew how to test seed corn. This book is sent free for the asking.

PEPPER

Culture: Sow in hot bed in March and transplant to open field in June. Set the plants about 18 inches apart each way.

Bull Nose. A prolific, rather early variety, bearing large, scarlet fruits. Earlier than the Ruby King.

Chili: Very productive; fruits very small, very red and very hot.

Ruby King. The most popular, large, red pepper. Plants grow two feet high and produce a crop of handsome, large, scarlet fruits. Flesh sweet, tender and mild.

Golden Dawn. A beautiful yellow pepper resembling the Bull Nose in shape, but golden yellow in color.

Any variety: Pkt., 5 cts.; oz., 30 cts., postpaid.

PUMPKIN

Among the varieties of pumpkin that are grown, the Connecticut Field is probably the most desirable one for field planting in our latitude. As pie pumpkins we especially recommend the Japanese and the Small Sugar as the two that have especially demonstrated their value as to productiveness, early maturity and quality.

Culture: Same as for cucumber. The hills should be 8 or more feet apart. Field varieties are commonly grown in corn fields by sowing seeds in every third or fourth hill.

Connecticut Field. This is the earliest field pumpkin. Immensely productive and commonly grown in corn fields for stock feeding. Also good for pies. Oz. 5 cts.; $\frac{1}{4}$ lb., 15 cts.; lb., 40 cts., postpaid. By express or freight, lb., 30 cts.; 10 lbs., \$2.00.

CONNECTICUT FIELD PUMPKIN

King of the Mammoths. A pumpkin of immense size; matures rather late for the extreme north. Flesh is thick, bright yellow, fine grained and excellent for pies. $\frac{1}{4}$ oz., 5 cts.; oz., 20 cts.; $\frac{1}{4}$ lb., 50 cts.; lb., \$1.25, postpaid.

SMALL SUGAR PUMPKIN

in the row. Cultivate thoroughly. The following spring transplant to rows 5 feet apart with plants 3 feet in the row.

Mammoth. This variety is vigorous and productive. Stalks 12 to 15 inches long, one inch or more thick. An excellent sort for pies or sauce. Pkt., 5 cts.; oz., 10 cts., postpaid.

Japanese Pie. This variety is both curious and useful. The skin is deep green with dark stripes which turn to golden yellow. Seeds are peculiarly marked. The seed cavity is small and the neck is solid flesh. Matures early and is of the finest quality. We know of no better pie pumpkin. 1-3 oz., 5 cts.; oz., 15 cts.; $\frac{1}{4}$ lb., 35 cts.; lb., 85 cts.; postpaid.

Small Sugar. The standard pie pumpkin, resembling the field variety in color and shape, but of very much smaller size, averaging from 8 to 12 inches in diameter. Is as fine grained as average squash and of excellent flavor. 1-3 oz., 5 cts.; oz., 10 cts.; $\frac{1}{4}$ lb., 25 cts.; lb., 75 cts., postpaid.

RHUBARB or PIE PLANT

Culture: Sow the seed in rows a foot apart in May. When the plants are well up, thin to 6 inches

When the plants are well up, thin to 6 inches

O. W. Kinney, Welcome, Minn.

Wheeler's Model Collection of Garden Seeds, 30 varieties, \$2.00 worth for \$1.00 will plant one-tenth of an acre. Don't miss it.

RADISH

For extremely early growing the small globe or olive-shaped varieties and the Icicle are the best. For later spring and early summer some of the long-rooted varieties give better results for the ground occupied. The Icicle and Rosy Gem are the most popular, very early sorts for both forcing and early planting in the open ground.

Culture: Sow as soon as the ground can be worked in the spring in rows 8 to 10 inches apart. Sow at intervals of a week or ten days for a succession up to the middle of June.

Scarlet Globe. A very popular, extremely early, globe-shaped radish, maturing in about 25 days. Very desirable for early sowing in open ground or for forcing.

Rosy Gem. A handsome globe-shaped variety of rosy scarlet shading to white at the tip. The beautiful red roots with the pure white tips present a very attractive appearance either on the table or as offered for sale on the market.

French Breakfast. One of the standard early radishes. Roots of oblong shape, red above, changing to clear white in the lower portions.

White Icicle. This is becoming one of the most popular radishes grown. Its earliness, attractive appearance and excellent quality make it one of the most valuable of all radishes. It remains in fine condition longer than any other first early. It is not only the best early variety, but is one of the best general crop varieties as well. In our trial grounds this year our stock of Icicle was ahead of all other varieties tested.

Chartier. The largest and handsomest summer sort. The roots are long, crimson, tipped with white. The hardest sort for summer culture.

Scarlet China Winter Radish. The standard winter variety.

Any variety: 1-3 oz., 5 cts.; oz., 10 cts.; ¼ lb., 25 cts.; lb., 65 cts.; postpaid

TURNIP

Both the English and the Swede Turnip or Rutabaga are desirable garden crops and the latter are also desirable for stock feeding. One feature about turnips is that they can be sown very late in the season and can follow some of the earlier crops in gardens where space is a consideration.

Extra Early Purple Top Milan. The Earliest English turnip in cultivation. Roots flat, white purple top. ½ oz., 10 cts.; oz., 15 cts.; ¼ lb., 30 cts.; lb., 80 cts., postpaid.

Purple Top Strap Leaf. The popular fall flat sort. More largely grown than any other variety.

Golden Ball. Not of large size, but firm and of good flavor.

Golden Globe Rutabaga. Very similar to the Purple Top Yellow, except in the color of the crown which is green instead of purple. An excellent variety and a good yielder

Purple Top Yellow Rutabaga. A hardy and productive variety. A good strain.

Any variety except the Early Milan: 1-3 oz., 5 cts.; oz., 10 cts.; ¼ lb., 20 cts.; lb., 60 cts., postpaid.

For field varieties see Field Root Crops, page 35.

SALSIFY or VEGETABLE OYSTER

Culture: Sow as early as the ground can be worked in drills 12 inches to 2 feet apart. Later thin to 5 inches in the row. Cultivate thoroughly. Roots that are to be used in the winter should be stored in a cool cellar. Those desired for spring use should be left in the ground over winter and dug as soon as frost is out.

Mammoth Sandwich Island. Roots large and of superior quality. Delicate in flavor; double the size of the old variety. Pkt., 5 cts.; oz., 15 cts.; ¼ lb., 40 cts.; lb. \$1.25, postpaid.

I think your seeds are as good as any that can be bought. Your manner of doing business is absolutely fair to every one. I highly recommend your house to my neighbors.
O. F. Kieser, Wessington Springs, S. D.

Mehler's Handy Garden Tool is just the thing for the garden. Several tools in one at the price of one. See page 73.

WHITE ICICLE RADISH.

SPINACH

Culture. Sow in the early spring in drills a foot apart; thin out freely for use. It should be used in the spring and early summer for it becomes tough later. It can also be easily grown in the early fall.

Long Standing. Leaves large and thick, dark green in color; remains in edible condition longer than any other sorts. Best for spring growing. Pkt., 5 cts.; $\frac{1}{4}$ lb., 15 cts.; lb., 45 cts., postpaid.

SQUASH

Culture: Same as for cucumber except the hills should be 8 or more feet apart.

DELICIOUS SQUASH.

Delicious. No squash excels this in firmness and compactness of grain, dryness, sweetness and richness of flavor. An excellent winter squash for general culture. Our seed of this variety has been saved from selected specimens grown in Stanley County, South Dakota. This stock is extra fine. 1-3 oz., 5 cts.; oz., 15 cts.; $\frac{1}{4}$ lb., 35 cts.; lb., \$1.00 postpaid.

Improved Hubbard. The popular standard variety for winter use. Shell dark green warty, flesh bright yellow, fine-grained, very dry and of rich flavor.

Golden Hubbard. This variety is similar to the Hubbard, but has a skin of bright red color. It is somewhat smaller and earlier than the common Hubbard, but is equally as productive and fine in quality.

Mammoth Chill. With nearly everything we grow, size is one of the first considerations. It is the largest ear of corn, the largest squash or the largest pumpkin that attracts the most attention at our county and state fairs. The Mammoth Chill is the largest variety of squash grown. If you wish to take the premium at your state or county fair on the largest squash try this. 1-3 oz., 10 cts.; oz., 20 cts.; $\frac{1}{4}$ lb., 50 cts.; lb., \$1.25, postpaid.

Sibley or Pike's Peak. An old standard variety of fine flavor and remarkable keeping qualities. The same season of Hubbard and very productive. In size about the same as Golden Hubbard.

Mammoth White Bush. A large strain of the Early White Bush summer squash. Nearly as early as the smaller strains and about twice the size.

Golden Custard. This is the mammoth strain of Golden Bush summer squash, similar to the Mammoth White Bush except in color. A valuable summer variety.

Yellow Summer Crookneck. A true bush in habit of growth; very early and productive.

White Summer Crookneck. Similar to Yellow Summer Crookneck, except in color.

Any variety except where noted 1-3 oz., 5 cts.; oz., 10 cts.; $\frac{1}{4}$ lb., 30 cts.; lb., 75 cts., postpaid.

I am very well satisfied with your manner of doing business and shall send a larger order next spring.
Carl Hunter, Fairview, Mont.

Prof Green's book "Vegetable Gardening" will tell you just how to care for your garden to get the best results. Whether you are a new or old hand at gardening you need this book for reference. Sent to you postpaid for \$1.00. Order it today.

TOMATO

Culture: Sow seed during March and April in boxes in house or hot bed. As soon as the plants begin to crowd themselves, plant in boxes or frames 4 to 6 inches apart each way. After danger of late frosts is past plant in the open ground 3 to 4 feet apart. In this latitude, plants should not be put into the ground until about June first. Tomatoes require good cultivation and a fertile soil.

Earliana. The earliest, smooth, bright red tomato among the standard varieties. Fruits average about three inches in diameter and are somewhat flattened. Plant is a vigorous grower and a good cropper. We recommend this sort as a first early for the home and market garden. Our seed is Dakota grown.

Chalk's Early Jewel. This variety follows the Earliana in season. For the north it is a very valuable, early and general purpose bright red tomato. Fruits are larger and are produced more abundantly than the Earliana. We recommend this as a very good second early. Our seed is Dakota grown.

Early Minnesota. An early smooth tomato of good size and very productive. This ranks with Chalk's Early Jewel as one of the earliest smooth good tomatoes grown.

Dwarf Champion. A very distinct medium early tomato. Plants are dwarf having stiff, bushy stem and thick, deep green leaves. Very different from the common varieties. Fruits are deep purplish in color; of medium size and round. This is one of the best and most popular varieties grown in the Northwest.

Acme. The popular standard bright pink tomato; of medium size, and smooth.

Beauty. As early as the Acme and more solid in flesh.

Matchless. An extra large, smooth and handsome, bright red tomato. Considered as one of the best large-fruited general crop sorts.

Ponderosa. Largest fruited variety in cultivation. Fruits are deep purple in color and have small seed cavities containing very few seeds. We have grown fruits too weigh over two pounds.

Golden Queen. A very good, large, smooth, yellow tomato of mild flavor.

Yellow Pear. Fruits are small, yellow, pear-shaped. Very productive.

Red Cherry. Fruits are small and handsome. Used for pickles and preserves.

Ground Cherry. A husk tomato. An old standard garden fruit, greatly valued for preserves. When ripe it is one-half an inch in diameter and very sweet. Excellent to eat out of hand.

Prices: Earliana, Chalk's Early Jewel and Ponderosa: Pkt., 5 cts.; $\frac{1}{4}$ oz., 25 cts.; oz., 40 cts.; $\frac{1}{4}$ lb., \$1.00. Any other of the above varieties; Pkt., 5 cts.; $\frac{1}{4}$ oz., 20 cts.; oz., 30 cts.; $\frac{1}{4}$ lb., 75 cts., postpaid.

In Wheeler's Model Garden Collection we have selected the seeds for you, 30 of the best varieties in the catalog, \$2.00 worth for \$1.00. Order to-day.

THE BIG 4 TOMATOES

THORNBUR
YAKIMA
DAKOTA FARMER
FIELD'S EARLY JUNE

FOUR NEW VARIETIES, ALL EARLIER THAN THE EARLIANA.

Early tomatoes and big tomatoes always attract a great deal of attention. We have been studying the tomato problem ever since we have been in business and now feel that we have just the varieties suitable for the Northwest.

In presenting to our customers in 1910 the four new tomatoes listed below, it may have appeared that we are extravagant in our claims on each of the four and that it would be just as well to pick out one and center our attention on it rather than to offer the four varieties. However when one grows these four side by side, as they were grown this summer in our trial grounds, there appear strong points in each one. The four are entirely different. Each one has its strong points. It may be that in certain localities one of the four would overshadow all the others, in another locality another variety may shine in particular, but in our trial grounds and everywhere else where these have been grown where we have had an opportunity of making a comparison they are all better than any of the standard varieties. We are so confident that we have in these four tomatoes just what the gardeners have been looking for that we want every gardener in the Northwest to give them a trial.

The seeds of these four new varieties as well as those of the Earliana and Chalk's Early Jewel, which we offer in our list of standard varieties are all Dakota grown. The larger part of them were grown at Brookings, S. D., the remaining portion in Davison County in the vicinity of Mitchell. We find that our home-grown tomato seed is giving especially good returns throughout our territory. It costs from three to five times as much to grow tomato seed here as it does to grow it in the localities where tomato seeds are usually produced for the trade. We are pleased, therefore, to be able to offer this home-grown seed this year. Previous to this time we have been unable to secure them grown here in the way we would wish them grown.

THE THORNBUR TOMATO.

All the seeds I have received from you were O. K. I like your way of doing business.

William Jane,
Blunt, S. D.

RAISED 100 BUSHELS RIPE TOMATOES FROM 4 PACKETS OF SEED.

I purchased one packet each of your Big 4 tomatoes last spring for trial. I raised about 100 bushels of ripe tomatoes from these four packets. I had the earliest ripe tomatoes in this locality. Your Big 4 are the best tomatoes I ever raised for this locality. I shall raise a lot more next year.

O. J. Townswick, Madison, S. D.

VINES WERE LOADED.

Your Big 4 tomatoes are just fine. I had the nicest tomatoes around here. I had a great many compliments about them. The vines were loaded. They were as pretty as any picture you ever saw of them.

Mrs. Estelle Hare, Huron, S. D.

Your seeds are first class. I have found your way of doing business fair, straight and honest.

I. G. Fjerstad, Bryant, S. D.

I like your method of doing business and I believe that it will prove a winner with the farmers throughout the country.

C. H. Lugg, Parkston, S. D.

You're the only seedsman that I have sent money to that I had faith that I would get a square deal.

E. D. Smith, Piedmont, S. D.

Have you tested your seed corn?

**Special
Offer**

One Packet of each of

**THE
BIG 4**

Thornber
Yakima
Dakota Farmer
Field's Early June

35c

THORNBUR TOMATO

700 Bushels of Ripe Fruit from one-half acre at Brookings, S. D.

Ripe Fruit the middle of July in Central South Dakota

When we offered the Dakota Farmer tomato in our catalog, we recommended it very highly. We do not wish to retract from the statements that we made at that time regarding that variety. In the Thornber, however, we have one which we think in several ways very decidedly surpasses the Dakota Farmer, especially for the home-garden and for home market. The Thornber tomato has been grown by Mr. A. E. Thornber of Brookings, S. D., for ten years. He has continually selected it for uniformity in shape and for large size and at the same time has looked to the point of earliness so that it today ranks as the earliest large-fruited variety we know of. The plants grow very large and spread on the ground. The foliage is plentiful and medium light in color. The fruits are large, red, solid and smooth. Many of them weigh from 3-4 to 1½ pounds each and there are very few small fruits produced. The flavor of the fruit is fine and there are very few seeds. The first picking of this tomato in 1909 was made July 28th and in 1910 July 12th. At this time it sold in the Brookings' market for \$6.00 per bushel. Later and throughout the season, it brought 25% more in price than any other variety on account of its appearance, quality and good keeping. In Brookings and vicinity, all gardeners who know this variety will grow no other. Wherever it has been tried in other parts of the state, it has given equal satisfaction so we feel entirely justified in giving special attention to this variety and placing back of it our unqualified recommendation. Pkt. of 300 seeds 15 cts.; ½ oz., 75 cts.; 1 oz., \$1.25.

A Single Plant of the Thornber Bearing over 150 Fruits at One Time. Raised by A. E. Thornber Brookings, S. D.

I got your garden and flower collection last spring and they were fine. I think every seed came and the Thornber tomatoes were immense. I never had such strong plants and such nice tomatoes. Will have no other if I can get them. All the seeds I got from you were just fine. I wouldn't ask for any better.

Mrs. J. H. Reynolds, Chapelle, S. D.

The Thornber was certainly fine flavor and a good yielder. I have only used your garden seeds so far and they were all O. K., the best I have had. Shall get my seeds from you next spring.

E. C. Norgord, Hanley Falls, Minn.

The Thornber tomato is first class. I raised one stock from this seed this year which had 52 fine tomatoes on it.

S. R. Grabill, Wagner, S. D.

The Thornber is early, good flavor, solid and the best yielder I have ever tried, very uniform, smooth and round. I think you are all O. K.

W. F. Michel, Willow Lakes, S. D.

Your packages contain so much more seed than others do and your business methods seem so much fairer that I can heartily recommend you.

Jas. Dalton.

The Thornber Tomato

The King of the Big 4

YAKIMA TOMATO

The Earliest of the Big 4

This tomato was secured from North Yakima, Wash., three years ago for trial but without a name. It has been grown by Mr. Thornber at Brookings for three years and has proved to be the earliest variety that he has grown and he has tested nearly all of the standard varieties. Compared with the three others of THE BIG 4, it is the earliest of them all. Besides being early, it is very productive of early tomatoes. It does not produce one or two ripe tomatoes and then wait a week before giving another ripe fruit. Mr. Thornber has picked as much as a bushel and a half of ripe fruit from a single plant of the Yakima in two pickings.

In shape and size the Yakima is not equal to the Thornber, but it is very much better in this respect than the Earliana or any other early tomato. A peculiarity of the plant is that it spreads in such a way as to expose the fruit to the sun so that it ripens very quickly and evenly. The foliage is not so rank as on some other varieties. So far as our own experience goes with this tomato, we can give it the strongest recommendation as an extremely early variety, and think that it is decidedly worthy of trial by anyone who wishes the earliest market variety that he can secure. Most of the extremely early varieties are irregular in shape and unattractive. The Yakima is better in this respect than any of the other early tomatoes. Its dark red fruits present a very attractive appearance. Pkt. 10 cts.; $\frac{1}{2}$ oz., 60 cts.; oz., \$1.00.

DAKOTA FARMER TOMATO

Dakota Farmer is without a superior. It won first premium at the South Dakota State Fair as exhibited by Mr. Thornber, also first premium at the Brookings County Fair as exhibited by Mrs. Yule of Brookings. Dr. Youngman, of Canon City, Colo., who has given considerable attention to tomatoes, writes as follows: "I matched the Dakota Farmer tomato against the Earliana and two other much praised tomatoes and it beat them all in earliness and quality." At Madison, S. D., where this variety originated it has proved the most productive of all varieties. Single plants have produced over 100 saleable tomatoes, many of which would weigh over a pound. The fruits do not have the deep cavity at the stem like most other varieties and they have no core. It is one of the best shippers and keepers. This variety ought to be tried by every tomato grower. Pkt, 10 cts.; $\frac{1}{2}$ oz., 60 cts.; oz., \$1.00.

DAKOTA FARMER TOMATO

We first offered this variety in 1909 and gave it our strongest recommendation as an early tomato of large size and fine quality. We have no reason to retract in any way on anything we said at that time. The compliments that we have received from all over South Dakota as well as other states regarding this tomato, show that we were justified in the statements that we made regarding it. The only criticisms that we have had from any source have been regarding the size of the fruit. In a few localities it seems that it has not developed the large size that was shown in its home locality and in fact in most of the localities where it has been tried. In our first description we stated that it was only a few days later than the Earliana. In our trials the past two years it has been fully as early as the Earliana, but was not equal in earliness to the Thornber, the Yakima or the Early June. In general appearance the

FIELD'S EARLY JUNE

This variety has been introduced by Henry Field of Shenandoah, Iowa. He is noted for being an enthusiastic grower and when he gets a thing that he thinks is right, he isn't afraid to say so. He describes this variety as "A new early tomato, earlier than Earliana, large and smooth as Stone and solid as Ponderosa." The results of our trials fully warrant everything that Henry Field has said about this tomato. The tomatoes grow very large and smooth and begin ripening August first. If, in future trials, it shows up as well as it has so far it will be a rival to any variety that has yet been offered. Price per pkt, 15 cts.; $\frac{1}{2}$ oz., 75 cts.; oz., \$1.25.

Single Plant of Thornber Tomato Bearing 52 Fine Tomatoes. Grown by S. R. Grabill, Wagner, S. D.

SPRAYED Potatoes are Free from Bugs and Blight

NEW "BRANDT" COMPRESSED AIR SPRAYER

FIG 2

An all-around sprayer for the Orchardist, Farmer, Poultry Raiser and Dairyman. The No. 2 is made of galvanized Iron, holds three gallons, an amount sufficient to spray one mile of vines. It weighs six pounds and will last a life time. The pressure is maintained uniform at all times by an occasional stroke of the pump, one at every six or seven steps of the operator. This also keeps the spray uniform and distributes it in a finely beaded solid cone of mist. Handles Whitewash, Water, Paints, Copper Sulphates, Tobacco Infusion, Kerosene Emulsions, Paris Green mixtures, etc., perfectly. The pump is carried in the hands in a convenient position for operation and for directing the spray on to the plants or vines. The No 2 and "Easy" Sprayers have an automatic shut-off nozzle which permits the liquid to be discharged only when held open by the operator. For whitewash, Bordeaux and all heavy mixtures the No. 4 nozzle is required. This nozzle has larger openings.

By using our double nozzle twice the amount of vines can be covered with the same effort on the part of the operator.

The No. 3 Sprayer is the same as the No. 2 except that it is made entirely of brass which is necessary where sulphate of iron, sulphate of copper and strong solutions of corrosive mixtures are used.

PRICES.

No. 2 Sprayer, Single Nozzle.....	\$5.00
No. 2 Sprayer, Single & Double Nozzle..	6.50
No. 3 Sprayer, Single Nozzle.....	6.75
No. 3 Sprayer, Single & Double Nozzle..	8.25
"Easy" Sprayer, Galvanized.....	2.25
"Easy" Sprayer, Brass	3.25
Tree Nozzle	1.50
No. 4 Bordeaux Nozzle	.75

THE "EASY"

Holds one gallon. Very satisfactory for small gardens

DEMING' FIELD SPRAYER

One of the most satisfactory sprayers for use on large fields of potatoes or other farm or garden crops.

Prices:

	List Price	Our Special Price
FIG. 653 Field Sprayer without barrel pump but including 7 feet of hose and otherwise all ready to attach to ANY barrel sprayer ...	\$17.00	\$13.50
"Simplex" Barrel Pump, without hose, but with Y connection	9.00	8.50

FIG 653—Showing method by which Barrel Pump is attached to Potato Sprayer. This Potato or Field Sprayer will pass through an ordinary gate. Can be raised or lowered, and with any or all nozzles closed or opened as desired.

FIG. 653. Field Sprayer and "Simplex" Pump, used in connection, make up a complete (except barrel) and serviceable spraying outfit for large fields of potatoes, and takes the place of a more expensive outfit. Our SPECIAL PRICE, complete, is only \$22.00.

BRIGHAM'S BALANCED POULTRY RATIONS.

Made by us according to formulas of Dr. Arthur A. Brigham, the world's leading authority on poultry and poultry culture.

No recommendation is needed for these poultry foods further than to say that they are made according to formulas of Doctor A. A. Brigham, who has done more to encourage and educate the American public in poultry raising than any other living man. From his earliest boyhood he has been a lover and admirer of pure-bred fowls and all his life has been a keen student of everything pertaining to the care and raising of chickens.

DR. A. A. BRIGHAM.

His wide experience in breeding poultry and as instructor on the subject of poultry raising in several leading agricultural colleges makes him an authority on poultry feeding. Doctor Brigham is at present Principal of the Dakota School of Agriculture and Director of the Summer school. Previously he held many important positions as instructor in agriculture and poultry raising. See note below.

After much effort we secured the co-operation of Doctor Brigham in preparing these poultry formulas and we hold the exclusive right to use these formulas. Would you not rather buy poultry food prescribed by a poultry expert rather than the miscellaneous mixtures on the market many of which are prepared by persons who have little, if any, knowledge of the requirements in poultry feeding.

Brigham's Poultry Rations are of the same high standard and are backed by the same kind of a strong guarantee that assures you safety and satisfaction in buying seeds from this company.

Note. Doctor Brigham who has just been elected President of the South Dakota Branch of the American Poultry Association, is the author of Progressive Poultry Culture—the standard text-book in scores of Universities, Agricultural Colleges, Correspondence Schools and other schools throughout the United States and Canada. He is editor of the Progressive Poultry Journal, and a regular contributor to the Western Poultry Journal, the Industrious Hen and several other poultry and agricultural periodicals. He has to his credit many degrees and positions of importance, among which are B. S., Massachusetts Agricultural College, 1878; Professor of Agriculture, Imperial College of Agriculture, Sapporo, Japan, 1888-1893; Ph. D., University of Goettingen, Germany, 1896; Professor of Agriculture, College of Agriculture and Mechanic Arts, Rhode Island, 1896-1901; Experimenting in Incubation, Ithaca, N. Y., 1901-1902; Director Columbia School of Poultry Culture, 1903-1904; Lecturer University of Nebraska, 1905-1906; present position since 1907.

BALANCED RATIONS.

There isn't space here to go into detail about the balancing of feeding rations but we wish to call attention to just a few things. Our live stock breeders and feeders have been foremost in bringing about systems of feeding to produce the best pork, the most beef and the best type of "show" animals. They have been foremost in this in the same way that they have been foremost in the principles of animal breeding. Plant-breeders have had to learn from them and poultry raisers have had to do likewise.

The time is past when one can expect profitable returns from poultry without studying and putting into practice a scientific system of feeding. In this day and age the up-to-date poultry feeder does not depend upon feeding one or two quarts of screenings to his flock of chickens morning and night and gather in the eggs by the dozens in return.

WHAT IS A BALANCED RATION?

The animal body as well as the plant body needs certain kinds or elements of food to nourish it to secure the best possible development. A balanced ration is one prepared so as to give the animal these nutrients in just the right proportion to secure most economically the kind of results desired. The same ration that would lay on flesh is probably not the best one to produce eggs. Each ration is planned for a definite purpose.

The principle nutrients of foods are the carbohydrates and protein. The expression used to show the proportion of each of these is known as the nutritive ratio. The nutritive ratio for corn is about 1 : 11. This means that there is about 1 part protein to 11 parts of carbohydrates or starch compounds. This is a "wide" nutritive ratio. The nutritive ratio of beef scrap is about 1 : .7 or 1 part protein to seven-tenths of one part carbohydrates. This is a "narrow" nutritive ratio. The most expensive element is protein; therefore within reasonable limits the narrower a nutritive ratio, the more expensive. For this reason most of the commercial poultry foods on the market have altogether too wide a

nutritive ratio and do not contain sufficient protein to make a well balanced ration. The B-B Poultry Rations we are now placing on the market for the first time are not merely mixtures of grain and screenings which can be produced at a cost little above the market price of such grain. The B-B Poultry Rations are strictly speaking balanced rations made up from animal products, properly dried and cured, alfalfa meal, small grains, peas, and seeds scientifically prepared and all mixed in the right proportion and in the right form to secure the very best results.

DRY FEEDING OR HOPPER FEEDING

B-B Rations are adapted to hopper feeding. The practice of feeding a large part of the poultry feeds from hoppers or troughs is becoming very common among our best breeders and poultrymen. Better results are being secured by this method of feeding than where moist mashers or whole grains exclusively are used. By this method of feeding the dry mixtures or rations are kept before the fowls all the time.

BRIGHAM'S BALANCED CHICK RATION

Scientifically Prepared, Well Balanced for Young and Growing Chicks.

B. B. Chick Ration is put up in bags containing 50 and 100 lbs. Price F. O. B. they are about 10 weeks old. If they are educated to this system early they will the more readily adapt themselves to hopper feeding. This B-B Chick Ration contains every form of food needed by the young growing chick. It can be fed exclusively or in conjunction with whole small grain. The B-B Ration should be made the foundation of the feeding system.

If whole small grain is also fed it should be scattered in the litter so that the chicks will be required to scratch for it. In this way the most rapid and healthy development of young chicks can be secured.

B. B. Chick Ration is put up in bags containing 50 and 100 lbs. Price F. O. B. Mitchell, S. D., 50 lb. bag \$1.40; 100 lb. bag \$2.50. Special prices will be made on orders of 5 or more bags or large assorted orders. Samples on request.

BRIGHAM'S BALANCED LAYING RATION

A Well Balanced Ration for Dry Hopper Feeding of Pullets or Laying Hens.

There are many so-called "egg-foods", "egg-producers", "tonics," and condimental foods on the market advertised to make hens lay. The B. B. Ration must not be classed with "foods" of this kind. Most of the articles on the market to make hens lay are merely condimental stimulants which may exert an influence for a brief time to increase egg-production but are in no sense foods and their apparently beneficial effect is short-lived. After being fed such stimulating tonics the fowls are absolutely unfit for breeding or anything but the block. The proper way to secure high egg-production is to feed plenty of nutritious food prepared with a view to furnishing the elements contained in eggs as well as to maintaining the health of the fowls.

B-B Laying Ration furnishes just the materials needed to maintain a strong vigorous healthy body and at the same time to produce the greatest number of eggs. It should be made the foundation of the feeding system for laying hens.

B-B Laying Ration is composed of ground grains, alfalfa meal, and meat products mixed in the right proportion for egg-production. It contains no grit or screenings and must not be compared to the cheaply prepared mixtures of cracked or ground grains of various kinds compounded without any reference at all to the needs of the fowls but purely with the idea of disposing of the by-products of some other line.

B-B Laying Ration is put up in bags containing 50 and 100 lbs. Price F. O. B. Mitchell, S. D., 50 lb. bags \$1.25; 100 lb. bag, \$2.25. Special prices will be made on orders of 5 or more bags or assorted orders.

Poultry Books That Are Right—See full description of books on page 70.

1 Poultry Manual—For plain and fancy breeders.....	25
2 Poultry Houses, Coops and Equipments, complete plans up-to-date.....	25
3 Chicks, Hatching and rearing—cold facts well stated	25
4 Egg money; How to increase it—Hundreds of plans	25
5 Turkeys, Ducks and Geese. Their care, raising and marketing	50
6 Simple Poultry Remedies. A doctor book for the poultry yard	25

Single Books, mailed postpaid at above prices; Entire Set, 6, postpaid \$1.50 1.75

Eating delicious "Cole's Watermelon" and "Dakota Farmer" tomatoes direct from the vine on the late date of Oct. 19, 1910. Tomatoes started bearing in August. Have not had to buy the kids any candy since Cole's began to bear.

F. C. Falkinburg, Belvidere, S. D.

May I tell you how much we liked the seeds purchased of you in 1909. The peas at eating time looked just like the pictures in the showiest catalogues and were the best ever. While the delicious squash were the finest we have grown.

R. J. Kelley, Bloomington, Minn., Jan. 22, 1910.

Don't sow any but hardy acclimatized alfalfa seed that has stood the test

POULTRY FEEDS

BEEF SCRAP, ALFALFA, BONE, ETC.

B-B SHORT-CUT ALFALFA

There is no other natural food product available to poultry feeders that comes so nearly being a balanced ration and at the same time combines the other requisites of a desirable food for poultry as alfalfa. It supplies succulent pasture during the summer and when properly cured and prepared supplies an equivalent in green food during the winter months. Alfalfa is almost indispensable to profitable winter egg-production as well as to the best development of chicks. When properly cured it forms one of the most valuable and cheapest sources of protein in poultry rations. It should however be well cured and of the best quality and free from an undue percentage of impurities.

There are numerous uses of **Short-Cut alfalfa** in poultry feeding. Steamed it makes excellent green food for fowls of all ages and description. In dry form it makes the best litter in which to scatter grain for young chicks. Nothing is better than **Short-Cut Alfalfa** for this purpose.

Put up in bags of 2 sizes; 50 lb. bag 95c, 100 lb. bag \$1.75, F. O. B. Mitchell, S. D.

B-B GRANULATED BEEF SCRAP

Properly prepared **Beef Scrap** furnishes the most concentrated form of protein for poultry feeding. It will go farther in balancing a grain ration than any other available food. For those who prefer to make up their own balanced rations **Beef-Scrap** is indispensable. Even where the proper nutritive ratio can be secured with products of vegetable origin it is not desirable to omit animal products. Vegetable protein does not wholly take the place of animal protein. The most desirable ration is one having the proper proportion of both. As **Short-Cut alfalfa** furnishes the best source of vegetable protein so **Beef-Scrap** furnishes the best available source of animal protein.

Put up in bags of 2 sizes; 50 lb. bag \$1.75; 100 lb. bag \$3.35 F. O. B. Mitchell. Prices subject to change.

B-B POULTRY BONE

Grit must be supplied to fowls in order that they can properly grind the grains and other foods fed to them. It can be supplied in various forms, either as purely mechanical grit in the form of crushed and screened rock or as a combination of grit and food in the same article. **B-B Poultry Bone** comes under the latter class. It supplies one of the best forms of grit for fowls of all ages and also supplies the phosphates necessary to the developing and growing frame. As our **B-B Poultry Bone** is prepared from green bones it contains in addition to phosphates a high percentage of protein which is the most expensive nutrient in all foods.

B-B Poultry Bone can be furnished in 3 sizes; **fine** for small chicks, **medium** for older chicks and **large** for fully developed fowls. All sizes are the same price. 50 lb. bag \$1.50, 100 lb. bag \$2.85, F. O. B. Mitchell, S. D.

B-B CRUSHED OYSTER SHELL

In addition to Poultry Bone laying hens require lime for the manufacture of egg shells. This is best furnished in the form of **Crushed Oyster Shells**.
100 lb. bag 95 cents.

BLATCHFORD'S CALF MEAL

This meal has been found to be an excellent food for poultry as well as for calves. A hopper of the meal should be kept before the fowls from chicks to adults at all times. They will help themselves to just the amount needed in their diet.

See full description and prices on inside back cover page.

Germifuge

A valuable ointment for the poultry yard and stable as well as for family use. Germifuge will positively eliminate head lice, cure scaly leg and all external parasitic troubles of poultry and its application is attended with no danger for it is equally effective when administered internally for all diseases of a germicidal character. This covers practically the entire field of chicken troubles for when you find an extreme condition that is neither of parasitic nor germ origin the ax is about the only remedy.

Whether you have use for it in the house, poultry yard or stable you will find Germifuge worthy of a trial and once tried you will never be without it. By mail postpaid, 2 oz. tin, 25 cents; 4 oz. tin, 50 cents. By express or freight, charges paid by receiver, pound, \$1.00.

DISCO

LABORATORY PRODUCTS

Disco DISINFECTANT

For centuries physicians and others have spent their lives trying to discover methods of curing disease. Since the discovery of the germ origin of disease much time has been given to a study of prevention. The old adage, "an ounce of prevention is worth a pound of cure" is particularly applicable to most diseases. With the knowledge that we have to-day on this subject one is often very much surprised at

the lack of attention given to it by farmers and poultrymen. Here is one place in particular where science has come to the aid of the stock raiser and is giving him the best of aid in the prevention of disease in his flocks and herds. In **DISCO** disinfectant we have just the article you have been looking for—a standard article of high germicidal value, easy to use and reasonable in price.

DISCO disinfectant is adapted to so wide a range of uses that it is hardly possible here to do more than mention a few of them. One of its greatest values lies in its regular use as a spray in stables, pens and yards used for housing poultry and domestic animals of all kinds. In addition to its general use it has numerous specific uses as a remedy and preventive of numerous diseases of cattle, horses, swine, sheep, dogs and poultry. There is hardly a disease of any kind of live stock in which **DISCO** does not prove a very special and valuable aid.

Cleanliness and the use of a reliable disinfectant are the only certain safeguards of health in the poultry house and yard. Once disease, as a result of unsanitary conditions has secured a start, a thorough cleaning will not alone check it. A reliable disinfectant is also necessary.

In order to meet this need we are offering our **DISCO** disinfectant. There are numerous crude articles in use by some people as disinfectants and insecticides, but they are usually obnoxious and ineffective and really no cheaper than **DISCO**. One pint of **DISCO** to twelve gallons of water or in the proportion of 1 to 100 makes an effective spray and wash for all general purposes, at a cost not to exceed one and one-half cents per gallon.

DISCO disinfectant is an excellent article to use in incubators. The machine should be thoroughly scrubbed over the entire inside, trays and all, with a 10 per cent solution of **DISCO**. The eggs may be placed in machine while it is still wet and in addition to this the moisture supplied during incubation should be a 10 per cent solution of **DISCO** in place of clear water. Better hatches of stronger chicks are secured in this way. Put up in 4 sizes.

1 qt. can, making 25 gal. disinfectant, 50c.; ½ gal. can, making 50 gal. disinfectant, 90 cts.; 1 gal. can, making 100 gal. disinfectant, \$1.50; 5 gal. can, making 500 gal. disinfectant, \$6.25.

If we have no agent at your place we will prepay freight or express on gallon or 5 gallon cans at above prices.

Disco LICE POWDER

There is more humbug in the lice-powder line than in most others. Many of the so-called lice-powders on the market are absolutely ineffective against lice. Our **DISCO** lice powder is made according to a formula that is pronounced by experiment stations as more effective than any commercial article tried in comparison with it. The efficiency of **DISCO** lice powder can be very easily demonstrated by anyone to

his own satisfaction. Take a bird that is covered with lice and shake the powder among the feathers especially in the fluff on the rear and lower parts of the body and under the wings. After the lapse of a minute, shake the bird, loosening its feathers at the same time, over a clear piece of paper. Dead and dying lice will drop on the paper in great numbers. Anyone who will try this experiment will have no further doubt of the wonderful efficiency of the **DISCO** lice powder. Put up in one size package only. Full pound package 25 cents; by mail postpaid 35 cents. Prices in larger quantities on application.

Disco LICE PAINT

Radical measures are necessary to thoroughly rid a chicken coop of mites and lice. Painting the roosts and spraying the coop thoroughly with **DISCO** lice paint is the most effective means known. If this is done at the time of the fall house-cleaning when the coops are being prepared for winter and followed at intervals of a month in winter and 2 weeks in summer with a spray of a one or two per cent solution of

DISCO disinfectant no lice will thrive on the place and your poultry plant will be at all times of the year practically free from lice. Put up in 3 sizes of cans; Quarts 35 cts.; half-gallons 60 cents; gallons \$1.00. If we haven't an agent in your locality we will send you a gallon express paid for \$1.00.

Your seeds were very satisfactory though I failed to raise a thing—the drouth hit me hard. But the seeds made a good start and showed what they would do if they had a chance. I expect to go at it again next year and try yours again.

Alvin C. Dickson, Billings, Mont.

Your manner of doing business is very satisfactory and your seeds are good, and what little experience I have had with them I find the onions and watermelons extraordinarily good, and hope that next year I can say the same of other varieties which I expect to order this year.

M. L. Russell, Baker, Mont.

Don't sow alfalfa seed from unknown sources.

THE "ALL-RITE" SANITARY FOUNTAIN and FEEDER

Clean, pure water is life to the chicks. Foul, dirty or stale water is sure death. Which are your chicks getting? Which would you rather have them drink?

The "All-Rite" is hung up out of the dirt and litter. Chicks cannot possibly foul it, they cannot get into it to get wet, they cannot get any dirt into it.

It feeds water or grit, grain, mixed chick feed, etc. It is easy to fill. Simply snap out the bottom part, fill the jar, snap the bottom part on again and invert. There is no need of removing the jar from the wire holder. It is strong and substantially made and folds up compactly for shipment.

Made with wire holders for the old style zinc-top Ball Mason Jar. Holds a quart or two quart jar.

Prices, 15c each, 2 for 25c. Postage 7c each, extra. Weight, 3 3-4 pounds per dozen. We do not include cans or jars with the "All-Rite."

A two-quart fountain holds sufficient water, grit, or grain for twelve or fifteen hens.

Increase your profits by saving the chicks. Start now by ordering the "All-Rite" Sanitary Fountain and Feeder.

CONE-TOP DRINKING FOUNTAIN

One of the simplest and most satisfactory fountains on the market. Easily filled, easily cleaned and can be placed anywhere. Requires no wall to hang it, nothing but a level place to set it. We offer them in 3 sizes: the 1 quart size for chicks, 2 quarts for developing fowls and 3 quarts for adults. Prices by freight or express: 1-qt. size each 20 cts., half-dozen \$1.00, dozen \$1.85; 2-qt. size each 35 cts., half dozen \$1.35, dozen \$2.50; 3-qt. size each 30 cts., half dozen \$1.60, dozen \$3.00.

GRIT and SHELL BOX

Fowls should have grit, oyster shell and charcoal before them at all times. This box has 3 compartments, one for each of the 3 articles or it may be used with small pens for grain, dry feed, beef scraps or anything else in dry granular form. Prices by freight or express: Each 50 cts., half-dozen \$2.75, dozen \$4.90.

SULPHUR FUMIGATING CANDLES

Easy to light, easy to extinguish and safe to use and very effective as a disinfectant. Lock fowls or other domestic animals out of house when using. Set candles in pan of water, light the candle, close room for 3 or 4 hours, when it should be opened and thoroughly aired before fowls are allowed to again occupy it. Price 10 cents each; by mail post-paid 15 cents.

PETTY POULTRY PUNCH

To keep a record of your young chicks as soon as hatched the only safe way is to punch the webs of the feet with a safe poultry punch, not a harness punch but a punch specially made for this purpose. There are sixteen different punch-marks that can be used. A punch mark is valuable even if used only to designate year hatched so as to prevent keeping old profitless hens for laying. In keeping pedigree records a punch is an absolute necessity. The Petty Poultry Punch we have found the safest and best on the market. Price each postpaid 25 cts.

EGGS FOR HATCHING

BRED-TO-LAY BARRED PLYMOUTH ROCKS

There is no more popular breed of fowls today than the old stand-by, the Barred Plymouth Rocks. As hardy layers, and as market poultry they stand without a peer.

The original source of our stock is one of the strongest bred-to-lay strains in the United States. For several generations no bird has been used as a breeder that hasn't laid 200 eggs or over in her pullet year. This is not an exhibition strain, for egg-production has been the chief object sought in selection of breeders. The birds are fine-looking birds but on the finer scoring points are to some extent lacking. They are of the long-bodied "egg-style" and look so they could turn out eggs by the hundreds. We offer eggs from 2 pens:

B. R. Pen No. 1. April hatched pullets bred from hens with records of 200 eggs or over, and sired by a cock bird whose dam was a

famous layer with a record for 235 eggs. Two of the ten pullets in this pen are daughters of a hen having a record of 236 eggs. The male we expect to use to head this pen is Captain Standish, whose dam laid 219 eggs, and whose sire was from a 235 record hen. He shows strongly the bred-to-lay type of body and is of good color. This pen should produce some high record individuals. Cockerels from this pen should be able to raise the egg-record of almost any flock. We offer a limited number of sittings from this pen at \$5.00 per sitting of 15.

B. R. Pen No. 2. This pen will be headed by a cockerel whose dam holds a record of over 200 eggs and the pullets will all be from high record stock. Eggs, per sitting of 15, \$3.00. 30 eggs for \$5.00.

EXHIBITION and UTILITY WHITE WYANDOTTES

The White Wyandotte is generally considered the most beautiful variety of domestic fowls bred today. Its beautiful curves, fine shape and pure white color lend to the variety an air of distinction hardly found in any other.

Aside from its beauty it is in every way a farmers breed of wonderful hardiness and utility. The White Wyandotte is pre-eminently a "general purpose" fowl, and is very popular, combining as it does both eggs and meat.

Our flock contains birds of the best exhibition type as well as records layers. The strain from which our foundation was obtained is noted for its pure white color and fine exhibition shape, having won a majority of the premiums at both the S. D. State Fair and the S. D. State Show for the past six years.

W. W. Pen A. composed of the best exhibition type of females, all pure white and of fine shape. At this writing we expect to use to head this pen "White Prince" whose dam has a record of 212 eggs and whose sire was first premium cock at the S. D. State Fair in 1911. Eggs from pen A. \$5.00 per sitting of 15.

W. W. Utility pens. Same strain as pen A. All birds of good form and color. For all general purposes equal to pen A. Eggs from utility pens \$3.00 per sitting of 15; 30 for \$5.00; 50 for \$7.00; 100 for \$11.00.

Breeding stock a matter of special correspondence.

W. A. WHEELER & SON

Breeders of Barred Rocks and White Wyandottes

Gentlemen, last season we bought our first seeds from your house. The order was much smaller than we intended it shall be for the coming season. We found your seed packets to contain more seeds than usually are found in seed packets of same price and nearly every seed grew with great vigor. Your seeds are O. K.

L. M. Strain, Stamford, S. D.

I only sent you for tomato seed and I found them very fine. The Thorner and Yakima were extra fine, especially Yakima. I will send you an order.

John B. Case, Belle Fourche, S. D.

THIS BUCKEYE INCUBATOR

CAPACITY 60 EGGS

\$9.00

Guaranteed to hatch every hatchable egg and remain in perfect working order for five years.

This incubator is equipped with every desirable device that can possibly add to incubator efficiency and we have no hesitation in recommending it to our customers as the **WORLD'S BEST HATCHER**.

Buckeye Incubators have been on the market 21 years and there are over 225,000 in successful operation.

They are made in four sizes and we will gladly send you a complete descriptive catalog of the entire line.

THIS BUCKEYE BROODER

CAPACITY 50 CHICKS

\$7.00

These brooders are built along the same lines as the brooders which are used with the greatest success by the largest poultry ranches.

Overhead hot water heat—a thermostat that regulates the temperature—perfect ventilation in fact an ideal Brooder that will raise every raisable chick.

Buckeye brooders are made in several styles and sizes to suit all conditions. Our incubator and brooder catalog shows all the details of construction, method of operation and the prices.

IF YOU KEEP CHICKENS YOU NEED AN INCUBATOR.

Anybody can hatch chickens with a Buckeye.

DOUBLE CLINCH LEG BANDS

If you pay any attention to your chickens at all you need leg bands. There is always some reason for wishing to be able to pick out some fowls from others whether because of laying qualities, or for exhibition or other distinctive characteristics. Don't depend on memory for this often fails you.

The only safe way is to use numbered leg bands and keep a record of each individual. Prices postpaid 12 for 15 cts.; 25 for 25 cts.; 50 for 40 cts.; 100 for 65 cts.

LICE KILLER NEST EGGS

A boon to the poultry-raiser as well as to lice-infected fowls. Keeps lice out of nests and off from hens. An economical and practical preventive. You may occasionally forget to spray coops when needed but these eggs when kept in the nests work all the time. Do not use in nests with sitting hens. Price 5 cts. each; box containing one dozen 50 cts. By mail postpaid 10 cts. each.

Exhibition Coops, shipping Coops, Egg and Chick Boxes and Poultry Supplies of all kinds. Write for prices on anything you need in this line. Get in touch with us and our methods and our supplies. We offer you quality goods, right prices, prompt service, expert advice and courteous treatment.

PATENT APPLIED FOR

H. & D. FIRELESS BROODER

This brooder presents an entirely new and valuable idea in brooder construction. The ventilation is acquired by simply affixing a strip of corrugated jute board over the top of the hover chamber ceiling, through which an 8-inch opening has been cut.

The hover itself is adjustable, fitting itself automatically to the young chicks, and the hover strips are made of non-ravelling felt, the latter being quite necessary to prevent the young chicks picking and eating the ravelings, which would, of course, be disastrous as experience has proven. The doors are designed so as to absolutely prevent the chicks from crowding into corners in the yard, to die of exposure and suffocation.

The yard has no corners, thus, there is absolutely no chance for the chicks to huddle in the yard, and the natural crowding and pushing of the chicks when seeking warmth, would soon find them back in the hover chamber among the hover-strips and comfort. The yard is adjustable simply by sliding along the bands which encompass the brooder. The correct way is to open the yard a little each day and not give the chicks the entire run until they are about two weeks old, after which they can live in the brooder until they attain the age of six weeks, when they can be safely moved to the colony house.

Aside from the hover-strips the brooder is manufactured out of the H. & D. celebrated corrugated jute board of celliform construction, and is at once strong and light, durable as wood, and much more easily cleaned, being absolutely sanitary, in fact, the result of over three years' study and experimenting.

Price: Each \$2.00, 3 for \$5.75; 6 for \$11.00; dozen \$20.00.

H. & D. FANCY EGG BOX

The best box on the market for shipping eggs for hatching.

The walls of this box are double thickness, giving it the greatest possible strength to withstand rough and careless handling. When ready for shipment the box is sealed with glue or gummed tape and as there is no cord necessary, the expressman is obliged to carry it in his arms, thus necessitating more careful handling.

Prices: 15 egg size, each 15c; 6 for 70c.; dozen \$1.25; 30-egg size, each 20c.; 6 for \$1.00; dozen \$1.75; 50-egg size, each 30 cts.; 6 for \$1.25; dozen \$2.25.

H. & D. CHICK BOX

The Proper ventilation has been the chief worry of shippers of day-old chicks, as they cannot stand draughts, and varying temperatures. The H & D Chick Box has the same system of ventilation used in the H of chick boxes.

Prices: 25-chick size, each 20 cts.; 6 for 80 cts.; dozen \$1.45; 50-chick size, each 25 cts.; 6 for \$1.15; dozen \$2.00.

SANITARY METAL BROOD-COOP

Rat, mink, mite, lice and rain-proof. The farmer's wife, the poultry raising public in general, have long been looking for a brood coop, that is vermin proof, easy to clean, thoroughly rain and storm proof, neat in appearance, light in weight, consequently easy to move from place to place. This Coop fulfills all these requirements perfectly.

These brood coops are made of galvanized steel, with no seams exposed, and are completely rain-proof. The No. 1 Coop, weighing only 12 pounds, can readily be picked up and moved from place to place. Constructed in a knock down form, are easily taken apart or cleaned, and when the breeding season is over, they can be folded up and stored away in a very small space. They are fitted with triple sliding door or 3 doors in one, the first

allows chicks to pass in and out, the second is made of screen to ventilate on warm nights and still protect the chicks from vermin and the third is a solid door to protect from cold and storm.

Prices: No 1 coop 17½x23 inches on the ground, 16 inches high in front and 12 inch in the back, each \$1.75; No. 3 coop 23½x29 inches on the ground, same height as No. 1 each \$2.50.

PROGRESSIVE POULTRY CULTURE

By DR. A. A. BRIGHAM

The Latest, Most Comprehensive and Practical Book on the
Market to-day.

Price, \$1.50, *postpaid*

A practical, progressive and systematic exposition of the science and best methods of poultry culture, written by one who is not only thoroughly efficient, but who is a veteran teacher, a tireless investigator, an acknowledged authority—and, above all, deeply imbued with an interest in the subject which he has so ably exploited.

Particular attention is given to line breeding, housing, artificial incubating, machine brooding, colonizing, producing broilers and roasters, balancing rations, dry feeding, methods of marketing, caponizing, and other special points of the modern science and practice of poultry culture.

WHAT THEY SAY

"It is plain, concise and practical and should be in the hands of everyone interested in poultry raising. We unhesitatingly commend it."—H. M. Harden of The Dakota Farmer.

"* * * it is the most complete treatise on the subject that ever came under my observation."—M. L. Dean, Mont. State Board of Horticulture.

"* * * one of the best books on this subject that it has been my privilege to see."—Prof. W. F. Schoppe, Mont. Agri. College.

"* * * very complete and especially helpful to those intending to go into the business of poultry raising on a commercial scale and also for the small poultry keeper."—Prof. B. O. Longyear, Colo. Agri. Station.

"I cannot say too much in praise of the book, especially the good practical common sense. I think it is just what we need on our farms. I shall say a good word for 'Progressive Poultry Culture' whenever I have a chance."—Mrs. N. Mac C. Allen, Oswego, N. Y.

EGG MONEY HOW TO INCREASE IT, by H. A. Nourse. A book of complete and reliable information on the more profitable production of eggs on the city lot, the village acre and the farm. The instruction in this book will make the "200 eggs a year hen" a reality for the intelligent poultry man. 123 pp., completely illustrated. Price, paper, 25 cents.

CHICKS: HATCHING AND REARING, by H. A. Nourse. A manual of dependable instruction in incubating, brooding, housing and developing winners and layers, fattening, killing and marketing broilers and roasting chickens. 126 pp., fully illustrated. Price paper, 25 cents.

POULTRY MANUAL, by Franklane L. Sewell and Ida E. Tilson. A safe guide to successful poultry culture in all its branches, fancy and practical; breeding and feeding; diseases and remedies; how to make farm poultry pay, etc., etc. 12 mo. 148 pp., Price 50 cents; paper, 25 cts., (40th thousand.)

TURKEYS, DUCKS AND GEESE, by H. A. Nourse and Geo. H. Pollard. It tells plainly and fully how to do every detail of the work of breeding, hatching, rearing, fattening, dressing, marketing and developing fitting, showing and selling for all purposes. This information will enable anyone to succeed in this work and save disappointment and needless loss of money. 128 pages, fully illustrated, Price, paper, 50 cents.

SIMPLE POULTRY REMEDIES. A book which describes the symptoms of each disease and tells how it can be cured and prevented by simple methods, without expense. The reader can tell at once, by the aid of this book, just what is the matter with any ailing fowl. The best and simplest remedies for each disease are given so that the sick bird may be cured and the spread of the disease to others prevented, often at a cost of only a few cents and sometimes without any cost at all. Prices, paper cover, 25 cents.

POULTRY HOUSES, COOPS AND EQUIPMENTS, by H. A. Nourse (editor of the Poultry Herald). A book of newest plans for building practical up-to-date poultry houses with description of coops, fixtures and poultry utensils for the farm or village poultry keeper. Profusely illustrated. 100 pp. Price, paper, 25 cents.

BOOKS FOR THE FARM AND GARDEN

Next to practical experience and an Agricultural College course the most valuable helps in learning the ins and outs of Fruit Growing and Farming are the books on Farm subjects. We have made up a list of the most practical ones and have arranged with the publishers to send them to you postpaid at list prices. We get practically nothing out of this but feel that we are doing a service to our friends and customers by helping them get the most reliable information on Farm subjects.

All books will be mailed postpaid at prices given.

stone fruits, grapes, small fruits, nuts, etc., etc. Profusely illustrated. 300 pages 5x7 inches. Price, cloth \$1.00 postpaid.

FARM GRASSES OF THE UNITED STATES OF AMERICA.

By William Jasper Spillman, Agrostologist of the United States Department of Agriculture. A practical treatise on the grass crop, seeding and management of the meadows and pastures, description of the best varieties, the seed and its impurities, grasses, etc., etc. Every phase of the subject is viewed from the farmer's standpoint. Illustrated. 248 pages, 5x7 inches. Cloth \$1.00

"VEGETABLE GARDENING," by S. B. Green, (10th edition revised.) This book is prepared especially for the farmer engaged in raising any kind of vegetables for home use or the market. More valuable information is crowded into the 252 pages of this book than can be procured from any other source.

Paper cover 50
Cloth \$1.00

THE CEREALS OF AMERICA

By Thomas F. Hunt, M. S. C. D., Agri., Professor of agronomy, Cornell University. If you raise five acres of any kind of grain you cannot afford to be without this book. It is in every way the best book on the subject that has ever been written. It treats of the cultivation and improvement of every grain crop raised in America in a thoroughly practical and accurate manner. Illustrated. 450 pages. 5½x8 inches. Cloth\$1.75

"AMATEUR FRUIT GROWING." As the name implies this book is prepared especially for the amateur and deals with conditions prevalent in the colder climates. Thoroughly practical, intensely interesting, and of great value to experienced Fruit Growers. Many new and simple plans and devices explained.
Cloth 50
Paper 25

FARM BLACKSMITHING

By J. M. DREW

Instructor in Blacksmithing, School of Agriculture, University of Minnesota

This book was compiled especially for beginners—the farmer's boy who is anxious to learn how to handle tools and appliances in the workshop—the student taking a course in blacksmithing in connection with other agricultural studies—or the farmer who hitherto has not acquired experience along mechanical lines and wishes to learn the simple and short methods of accomplishing results in the workshop 50

"FARM WINDBREAKS AND SHELTER BELTS" by S. B. Green. A manual of tree planting for windbreaks and shelter, with description of the most suitable trees. Practical cultural conditions from seed to maturity. Paper 25

SOILS AND CROPS OF THE FARM.

By George E. Morrow, M. A., and Thomas F. Hunt. The methods of making available the plant food in the soil are described in popular language. A short history of each of the farm crops is accompanied by a discussion of its culture. Illustrated, 310 pages. 5x7 inches. Cloth\$1.00

SILOS, ENSILAGE AND SILAGE

By Manly Miles, M. D., F. R. M. S. A. A practical treatise on the ensilage of fodder corn. Containing the most recent and authentic information on this important subject. Illustrated. 100 pages. 5x7 inches. Cloth \$0.50

THE POTATO

By Samuel Fraser. This book is destined to rank as a standard work upon Potato Culture. While the practical side has been emphasized, the scientific part has not been neglected, and the information given is of value, both to the grower and the student. Taken all in all it is the most complete, reliable and authoritative book on the potato ever published in America. Illustrated, 200 pages. 5x7 inches. Cloth \$0.75

AGRICULTURE FOR YOUNG FOLKS, by A. D. and E. W. Wilson. This book should be in every farm home. It deals with very day farm problems in a simple, concise and easy-to-understand manner, that makes it the most popular agriculture book on the market\$1.00

The best crop insurance is a field of alfalfa. See pages 10-15.

THE BOOK OF ALFALFA

History, Cultivation and Merits. Its Uses as a Forage and Fertilizer. The appearance of the Hon. F. D. Coburn's little book on Alfalfa a few years ago has been a profit revelation to thousands of farmers throughout the country, and the increasing demand for still more information on the subject has induced the author to prepare the present volume which is, by far, the most authoritative, complete and valuable work on this forage crop published anywhere. Illustrated. 336 pages. 6½x9 inches. Cloth

.....\$2.00

INSECTS INJURIOUS TO VEGETABLES

By F. H. Chittenden, S. C. D. A complete practical work, giving descriptions of the more important insects attacking vegetables of all kinds, with simple and inexpensive remedies to check and destroy them, together with timely suggestions to prevent their recurrence. Profusely illustrated. 5½x8 inches. 300 pages. Cloth. Price \$1.50

All of these books were written by practical men and in language that can be easily understood. No matter whether you are a beginner or an old hand at Farming you can learn something from these books.

Send all orders to

Dakota Improved Seed Co., Mitchell, S. D.

Highmore, S. D., Jan. 16, 1909.

Dakota Improved Seed Company,

Gentlemen:—

I am pleased to report that the garden seeds which I purchased from you last year came up to every requirement. Your method of testing and guaranteeing your seeds is very commendable. Under ordinary weather conditions I believe that the germination of your seeds in the field will nearly equal that made by your house before they are put upon the market.

Permit me to speak a word of praise for your Brown County Yellow Dnt corn. The half bushel of seed which I got from you last spring did not reach me until after all my other corn was planted. I planted this on a separate plot and gave it the same treatment as my other corn. We had no rain from July 4th until August 13th—at the latter date the Brown County Dent corn was well eared with an occasional ear getting ripe while the rest of my corn was standing still waiting for rain. Had it not rained on August 13th the Brown County Dent would have made good corn, as it was practically made at that time, while the other crop would have been of allure. My main crop the following year will be Brown County Dent, for, although it is a small corn, it is more drought resistant than any other corn in South Dakota. I would recommend its use everywhere west of the 99th parallel.

Yours respectfully,

H. H. Stoner.

Revillo, S. D., Jan. 14, 1909.

Dakota Improved Seed Company,

Gentlemen:—

I am glad to say that the garden seeds I secured from your company last spring were of the very best varieties and we had a splendid garden. Our folks especially enjoyed your Early Malakoff and Golden Bantam sweet corn, the first named being without any exception the earliest and nicest sweet corn I ever tasted. One row of your Wardwell's Kidney Wax string beans kept out table supplied for more than a month. They kept maturing just fast enough for us to use and we had them for dinner nearly every day. Basing my judgment as to quality of your seeds upon the success we had this year in our garden, I am very happy to recommend them to all.

Yours truly,

Mrs. J. A. Dillman.

I used your \$1.00 collection last year with the best results. Your Yakima tomato was much better than the Earliana.

H. H. McHose, Edgar, Mont., Dec. 21, 1911.

Your method of stating plainly the percent of germination of the seeds in each package is a great help at planting time and will without doubt bring you many new customers.

C. R. Whitaker, Hastings, Minn.

I like your plan of sending seed free from mixture or adulteration. The only seed I ordered from you was 25 pounds of rape. It did well considering the season.

J. Z. Downer, Roscoe, S. D.

I was well pleased with the seed I got. They all come fine and did well for the dry weather. I saw your display at the Fair this fall. I cannot speak too highly of your seed.

Mrs. Myrtle Clark, Broadland, S. D.

Always have though your seeds were what you claimed for them.

Chas. E. Kavanaugh, Burke, S. D.

The seeds that I received of you this spring were first class.

Wm. J. Benda, Jackson, Minn.

MEHLER'S HANDY GARDENER

Hoe, Rake, Weeder and Cultivator

IN ONE

Your attention is called to this new **Combination Garden Tool** which has been devised to meet the scientific gardener's requirements, cultivating at the right place—up to the plant and over the root.

The **Handy Gardener** is so constructed that it can be used in a comfortable standing position, being an **anti-back breaker**.

It cultivates on three sides of the plant at one stroke. The teeth will take hold, pulling out all large weeds, and the smaller weeds are cut out by the right-hand tooth which is flattened out to a knife blade. It can **rake all weeds** together and then pick them up.

It throws as much soil in hilling as a hoe, breaking the soil at the same time. Works just where you place it—against the wall or fence, no matter how crowded the plants you can reach between or under, and cultivate without difficulty.

You can do more work and better work in less time with Mehler's Handy Gardener than with any other tool or combination of tools. It **more than pays for itself** in a short period by the quality and quantity of work it does for the least time.

For sale by Dakota Improved Seed Co.,

Price 95 cents each. Saves the price of 3 other tools.

BROADCAST GRASS SEEDER

The **IMPROVED CYCLONE SEEDER** has stood the test of more than forty (40) years of exacting service. It will sow all varieties of Farm Seed that can be sown broadcast and with ease to the operator. Five acres per hour is a fair average for the **CYCLONE**. The seed is distributed evenly and with great saving of time which makes this a very practical machine on any size farm. It increases profits both ways—in better crops raised and in time and seed saved. It will pay for itself in sowing one bushel of clover seed. It is a convenient, practical and durable machine. Price\$1.35

FREE With every order for grass, clover or alfalfa seeds at catalog prices to the amount of \$25.00 or over we will send one of the above seeders free upon request. Only one will be sent as a premium to any one customer however large the order. It will not be sent unless you ask for it.

SPECIAL MENTION

MODEL GARDEN COLLECTION

DIAMOND BRAND GRASS SEEDS

FREE BOOK ON ALFALFA

HOLDEN'S IDEAL CORN TESTER

A GUARANTEE THAT BINDS

OUR NEW SEED PACKET

THE HARDEST ALFALFAS KNOWN

30 choice varieties of garden seeds all carefully selected; retail value \$2.00 mailed to your address postpaid for \$1.00. See inside front cover.

Please remember that when you buy Diamond Brand, grass, clover and alfalfa seeds, you are buying seed that you know is right.

A new book "Alfalfa in the Northwest" by W. A. Wheeler will be sent free to any purchaser of alfalfa seed or to any one who will send 3 names of those interested in alfalfa.

The tester that many seedsmen object to because their corn won't stand this kind of a test. All of our corn must stand this test or go for feed.

We guarantee the seeds we sell to be as represented by us in that we will replace any seeds or refund the money on any seeds sold by us that prove to be otherwise.

We do not know of another seed house in the United States which gives you on the seed packet, the stock number, year grown and germination test of the seed contained.

Pages 10 to 15 inclusive give you a fund of information about the hardest alfalfas known in the world today. Read about them. Try them in a small way this year and increase your acreage later.

SEED CORN BADLY DAMAGED AGAIN THIS YEAR

READ "CORN FACTS"

BY C. E. TWAMLEY

Mr. Twamley made a special study of corn testing for years and tells you in this book more about corn testing and the cause of poor seed than you can learn from any other source. Every corn grower should have it.

SENT FREE

We will gladly send a copy of "Corn Facts" free to anyone who asks for it. Don't delay. Now is the time to get your seed corn ready for spring planting and this book will be invaluable to you.

IT PAYS TO TEST

That testing seed corn pays well has been proven by thousands of farmers and these farmers who test their seed corn and plant good strong seed raise from 55 to 100 bushels of corn per acre every year. Small yields are due almost entirely to poor or weak seed. An average of two good ears on each hill will give you a yield of from 50 to 80 bushels per acre and most land throughout the corn belt will produce three good ears to the hill if good seed is planted. If you raise only 30 or 40 bushels of corn per acre you are raising an average of only one good ear on the hill. This is because you have many barren stalks and nubbins caused by planting weak seed.

A study of almost any corn field will show you the necessity of testing. Select a field of good corn and go through it carefully counting the missing hills, the hills with only one or two stalks and the stalks that have produced no corn. This kind of an investigation will show you how great is the need of planting only the best tested corn. Recently the Iowa State College made careful counts of the number of stalks per hill in more than 1000 representative corn fields. They found in some cases less than 40 per cent of a stand and the average was hardly 66 per cent including the weak unproducing stalks. Just think what that means. In 1000 fields of corn one-third of the ground was not producing a thing, was worse than idle because it had to be cultivated the same as the ground that was producing corn. Had these farmers planted tested seed and secured a perfect stand they would have increased their yield 15 to 30 bushels per acre and they would have done it at absolutely no increased cost of money or labor excepting the few hours in the winter testing the seed corn.

*The Late C. E. TWAMLEY
Inventor of Holden's Ideal Corn Tester. For
three years Secretary of the South Dakota Corn
and Grain Growers Association.*

Dakota Improved Seed Co.

Mitchell, South Dakota

If you haven't tested your seed corn do it now.

Insure a hay crop in dry as well as wet years by sowing alfalfa.

No. 1—400-Ear Box Tester

Quick, Simple, Accurate

THE HOLDEN'S IDEAL TESTER makes the test with nothing but water so you can see both the sprout and root system and save only the good, strong seed. Throw away not only dead ears but also all weak seed. It is the only tester that will give you an absolutely accurate test. No wet sand, sawdust or cloth for mould to travel in. Cannot dry out around the edges and spoil part of your test.

Awarded the Gold Medal at the National Corn Exposition, Omaha, December 9th, 1908

ONE EAR OF SEED EQUALS FROM
3 TO 12 BUSHELS OF CROP

No. 4—200-Ear Box Tester

Write for descriptive booklet and learn all about this Wonderful Tester

DAKOTA IMPROVED SEED CO.

MITCHELL,

SOUTH DAKOTA

TEST YOUR SEED CORN WITH HOLDEN'S IDEAL CORN TESTER

It will make more money than any any other machine or implement on your farm. You can test from 200 to 800 ears at one time. It takes only three to four hours to fill the trays and the tester does the rest, making a thorough germination test in four days.

No. 2—400-Ear Cabinet Tester

PRICES

F. O. B. Mitchell, S. D., or Des Moines, Iowa

No. 4.	200-Ear box tester,	- - -	\$ 5.00
No. 1.	400-Ear box tester,	- - -	10.00
No. 2.	400-Ear cabinet tester,	- - -	15.00
No. 3.	800-Ear cabinet tester,	- - -	30.00

"Planet Jr." FARM and GARDEN TOOLS

Space will not permit us to illustrate ALL of the "Planet Jr." Tools, but we will gladly send a 56-page Catalogue, FREE, on application.

"PLANET JR." NO. 4 COMBINED SEED DRILL, SINGLE WHEEL HOE, CULTIVATOR AND PLOW.

Price \$10.50
as a Seeder
only \$8.50.

This admirable tool combines in a single convenient implement a capital hill-dropping seeder, a perfect drill seeder, a single wheel hoe, a cultivator and a plow. It holds two quarts and as a seeder sows in continuous rows or drops in hills of five different distances. It is thrown out of gear by simply raising the handles. The index is accurate simple and easily set. The drill is detached and the tool frame substituted by removing but one bolt. It then becomes a single wheel hoe, garden-plow or cultivator. It is useful almost every day of the season, at every stage of garden work. With this one implement the small farmer can do practically all the work in his small crops.

"PLANET JR." No. 25 COMBINED HILL AND DRILL SEEDER, DOUBLE WHEEL HOE, CULTIVATOR AND PLOW.

This combined machine is intended for a class of gardeners who have a large enough acreage in crops for a Double Wheel Hoe to be used to good advantage, and yet prefer not to buy a separate wheel hoe. It is large enough for field use, for it holds 2½ quarts.

As a drill it is almost identical with the No. 4 Drill; will sow in drills or hills, 4, 6, 8, 12 or 24 inches apart and has the same automatic device for throwing out of gear and the new combined cut-off and seed index with thumb screw adjustment. It is thoroughly substantial and accurate in sowing all kinds of garden seed in either hills or drills.

As a Wheel Hoe it is identical with the No. 12 Double Wheel Hoe, the best machine on the market. The change from drill to wheel hoe takes but a moment and the entire combination is one we can recommend and guarantee satisfactory.

Price \$13.00

"PLANET JR." NO. 17½ SINGLE WHEEL HOE, CULTIVATOR, RAKE AND PLOW.

Price \$4.00

This single wheel hoe has a very serviceable set of tools several of them being of new design, such as have been found to work in the very best manner. It has 11-inch wheel, with broad face; is very light, strong and easy running. It has adjustable handles and quick change frame. The tools are a pair of 6-inch shield hoes and three all steel patent cultivator teeth. A practical self-guard holds up the plants, while thorough work is being done underneath; the frame changes in height and the wheel may be attached to the other side of the frame when both sides of the row may be hoed at one passage. This is one of the most convenient tools for a home garden or a small market garden and the price at which we offer it is very low.

"PLANET JR., NO. 12 DOUBLE WHEEL HOE, CULTIVATOR AND PLOW.

This perfected wheel hoe is invaluable for use in all small crops. Its variety of work is almost incredible. Changes and adjustments of the tools are made with the greatest quickness. It has 11-inch wheels, which can be set at four different distances apart; the frame is malleable, with ample room for tool adjustment and can be set three different heights. The handles are adjustable at any height, and, being attached to the arch, are undisturbed in making changes of adjustment in frame, wheels or tools. The arch is of stiff steel, unusually high; the quick change frame permits the tools to be changed without removing the nuts. All the blades are of tempered and polished steel.

The tools shown and sold with No. 12 are what gardeners use most and others can be added as wanted.

Price \$7.00.

ALL PRICES QUOTED ON THIS PAGE ARE F. O. B. MITCHELL, S. D. OR MINNEAPOLIS, MINN.

RED POLLED CATTLE

ARE THE BEST BEEF AND BUTTER BREED

These cattle have thoroughly established their right to this title through contests at many State Fairs and Expositions and on the American Farms under ordinary conditions which is the best proof of their excellent qualities.

The above cow Inez approaches nearest the ideal dual purpose cow I have ever produced and in fact her equal is hard to find. Her show ring record is an excellent one. She has been twice Grand Champion at the Iowa, Minnesota and South Dakota State Fairs. Her age at date photograph was taken was 5 years, weight 1500 lbs. She is a regular breeder and heavy milker.

steer from my herd won second place in competition with the breed. He was not entered in the slaughter test but probably will be in 1912.

MILK RECORDS

Space forbids submitting as much on this as I would like.

For 3 years a dairy cow contest has been held at the South Dakota State Fair. A Red Polled Cow has been in every one of these contests winning second in 1909 (with a two year old heifer) second in 1910 (producing more butter fat than any cow) and third in 1911.

At the Fargo North Dakota Fair in 1911 a Red Polled Cow from my herd won second place in a dairy contest where value of the milk and butter was considered and where the cost of feed was made a part of the contest.

My cow would easily have won first place, against her six competitors, who were all of a strictly dairy breed, had it not been for the fact that she was on the train for four days immediately preceding the contest. With this severe handicap she only lost first place by a scratch. The North Dakota Agricultural College conducted the contest.

Red Polled Cows make good return under ordinary farm conditions which entitle them to be called the Farmers Cow.

SHOW RING RECORD

My herd has won over 150 first premiums and over 50 championship at State Fairs the past few years. They have been in competition with the best herds of America and have come out ahead.

THINGS TO REMEMBER ABOUT RED POLLED CATTLE

They are good for both beef and milk.

They have no horns, are a solid red color, are hardy, are easy keepers, and mature early. What more could you ask?

RIVERVIEW RANCH

The name given my breeding farm, is situated five miles south of Alexandria, Hanson County, South Dakota. It consists of 1360 acres of as productive land as there is to be found, producing plenty of corn, alfalfa, timothy clover, wheat and oats.

I have probably the largest herd of Red Polled Cattle in America.

Can supply foundation herds not related.

Why not buy from the largest and best herd in the Northwest?

My prices are reasonable, quality considered.

WRITE FOR BOOKLET.

I have recently issued a booklet giving some information about the breed which will be mailed on request. Ask for copy today.

BEEF RECORDS

At practically every International Live Stock Exposition in recent years Red Polled Fat steers have been winners in the carcass contests.

In 1908 they won 3rd and 4th places in the two year old class.

In 1909 a 2 year old steer from my herd won 5th place, dressing out 65.2% while the first prize winner of a strictly beef breed only exceeded that percentage by a trifle over one per cent.

In 1911, they won 3rd and 4th places.

The above records were made in competition open to the world and all beef breeds competing.

The awards were not made on the fancy of some judge, that was perhaps prejudiced to some particular breed, but was based on the excellence of the carcass as beef. In other words "The best proof of the pudding is in the eating of it."

At the 1911 International Live Stock Exposition a yearling

W. S. HILL, - - ALEXANDRIA, S. D.

THE "DAKOTA" SILO

The Most Up-to-Date Swinging
Door Silo on the Market

A WESTERN SILO FOR
WESTERN FARMERS

Clear Fir Staves
Billet Steel Hoops
Malleable Iron Lugs
Perfectly Threaded
Hexagon Nuts and a
Hinge Door that will not
Sag or Warp

Quality Considered We
are Offering the Best
Silo on the Market
To-Day

Send for our
Illustrated Catalogue

DAKOTA SILO COMPANY

105 1st St.

Mitchell, South Dakota

Agents Make
\$4.00 to \$5.00
A DAY
Selling Guaranteed Seeds

THIS is the squarest deal ever offered to you and your customers because we guarantee every packet you sell. You can go right to your customer and say, "Here, this packet of seeds is carefully marked. It shows the variety, year grown, and the exact germination test. If I have misrepresented a single thing, I'll refund every cent you gave me." You can't help selling seeds under such a guarantee, because we back you up to the letter.

Unlimited Opportunities—Every farmer and gardener and 99% of the villagers and suburbanites buy seeds every year—especially farmers and gardeners, for whom Wheeler's Model Garden Collection described on inside front cover page of this catalog is an ideal proposition. It gives them actually \$2.00 worth of seeds for \$1.00.

ONLY ONE AGENT IN A PLACE

Exclusive Territory—Those who become our agents are assured of the exclusive right to sell our seeds in their territory, as long as they do the fair thing and work faithfully. We expect to favor the live agent who does things.

Credits on Mail Orders—If you call on a farmer and leave our seed book, tell him about our method of doing business, and our way of guaranteeing seeds, but you fail to get his order then and there, and he later sends his order direct to us, you will receive the regular commission just the same as if you had sent us the order yourself. We give you a fair and square deal in every way.

What better way can you find to put in your spare time during the winter months and earn a good salary besides?

Send At Once for further particulars of this offer and a long list of unusual commissions allowed on our entire line. This is your one chance to fill in the dulllest season of the year (December to April first) and make the easiest money you ever heard of. Remember, exclusive territorial rights are given. Write at once before somebody gets your territory.

Dakota Improved Seed Co.

Mitchell,

South Dakota.

INDEX

Ageratum	37	Cucumber	46	Parsnip	53
Antirrhinum	37	Cultivators	76	Peas, Garden	53
Alfalfa	10-15	Cypress Vine	37	Peas, Field	29
Alyssum	37	Dahlia	37	Pepper	54
Amber Cane	30	Daisy, Shasta	37	Petunia	38
Asparagus	41	Dianthus	37	Phlox	38
Asters	37	Emmer	27	Pinks	37
Balsams	37	Eschscholtzia	37	Poppy	38
Barley	29	Egg Plant	48	Portulaca	38
Beans	42	Endive	48	Potatoes	36
Beet	35-43	Flax	29	Poultry Books	70
Blue Grass	33	Flower Seeds	37-39	Poultry Feeds	62-64
Books	70-71	Four O'clock	37	Poultry Supplies	62-70
Broccoli	41	Foxglove	38	Pumpkin	54
Brome Grass	33	Freight Rates	4	Radish	55
Brooders	68-69	Garden Tools	73-76	Rape	30
Brussels Sprouts	41	Gladiolus	39	Rhubarb	54
Buckwheat	31	Gourds	38	Ricinus	38
Cabbage	43-44	Grasses	32-33	Rutabaga	35-55
California Poppy	37	Hollyhock	38	Salisfy	55
Candytuft	37	Incubators	68	Seeders	73-76
Carnations	37	Kaffir Corn	30	Shasta Daisy	37
Carrot	35-45	Kale	48	Snadragon	37
Castor Bean	38	Kohl Rabi	48	Sorghum	30
Cauliflower	45	Larkspur	38	Speltz	27
Celery	46	Leek	49	Spinach	56
Centaurea	37	Lettuce	49	Spraying Machines	61
Clovers	34	Mangels	35	Squash	56
Corn, Field	16-26	Marigolds	38	Sugar Beets	35
Corn, Fodder	26	Mignonette	38	Sunflower	38
Corn, Pop	48	Millet	31	Sweet Alyssum	37
Corn, Sweet	47-48	Morning Glory	38	Sweet Peas	39
Corn, Tester	74-75	Muskmelon	50	Timothy	33
Cosmos	37	Nasturtiums	38	Tomato	57-60
		Oats	28	Turnip	35-55
		Okra	52	Vegetable Seeds	40-60
		Onion	51-52	Verbena	38
		Pansy	38	Watermelon	50
		Parsley	52	Wheat	27
				Zinnia	33

LIVE PLANTS

During the spring season we can furnish vegetable and bedding plants right from the greenhouses and cold frames. These will all be of good stock and variety and will be well packed for shipment. As it is very unsatisfactory to have live plants sent by mail, they should be sent by express wherever possible. The following prices do not include express charges or postage.

PRICE LIST OF VEGETABLE PLANTS.

	Dozen	100	1000
Cabbage, early, seedlings		\$.75	\$5.00
Cabbage, early, twice transplanted	.15	1.25	
Cabbage, late, seedlings		.50	3.50
Cabbage, late, twice transplanted		1.00	6.00
Cauliflower, seedlings		.75	5.00
Cauliflower, transplanted	.25	1.75	
Celery, seedlings		.50	3.00
Celery, transplanted		1.00	6.00
Egg Plant	.25	1.75	
Pepper	.25	1.75	
Tomato, seedlings		1.00	5.00
Tomato, twice transplanted	.25	1.75	
Tomato, potted in 2 in. pots	.35	2.50	

BEDDING PLANTS

These can usually be furnished between April and June 30th at the following prices per dozen plants: Sweet Alyssum, 35 to 50 cts.; Asters, 35 to 50 cts.; Ageratum, 50 to 75 cts.; Colens 50 to 75 cts.; Daises 35 to 50 cts.; Geraniums 75 cts., \$1.00 and \$1.50; Heliotrope, 50 cts, 75 cts., and \$1.00; Lobelia 50 cts.; Salvias, 50 cts. to \$1.00; Pansies, 40 cts. and 50 cts., and Verbenas 50 cts.

Blatchford's Calf Meal

THE PERFECT MILK SUBSTITUTE

Will raise three calves at the cost of one where whole milk is used. The most profitable feed on the market for the farmer.

Wisconsin State Fair "Prize Winners", two years, 1910-1911. Raised on Blatchford's Calf Meal, by S. A. Baird & Son, Waukesha, Wis.

100 Pounds Makes 100 Gallons of Rich Nutritious Gruel

The time is past when calves can be raised at a profit on whole milk. To-day the milk is worth far more for other purposes; the cities are calling for it; creameries, cheese factories and condenseries cannot get enough and all of them paying good prices.

Sell Your Milk and Raise or Veal Your Calves on Blatchford's Calf Meal at 1-3 the Cost

This meal is a result of over 100 years experience in feeding calves and over 2,000 tons were fed in New York State alone last season indicating the quality and general satisfaction it is giving. Testimonials from all over the world. Make your calves show you a good profit this winter and spring.

PRICES F. O. B. MITCHELL, S. D.

100 lb. bag \$3.50.

50 lb. bag \$2.00.

25 lb. bag \$1.00.

On 500 lb. shipments freight will be prepaid to any point east of the Missouri river in South Dakota, Minnesota, Wisconsin, Iowa and Illinois.

FOR SALE BY

Dakota Improved Seed Co.

STATE AGENTS FOR SOUTH DAKOTA.

This is the Sign of Good Seeds