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Disco
GUARANTEED SEEDS

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EDITION DE LUXE

DAKOTA IMPROVED SEED COMPANY
MITCHELL, SOUTH DAKOTA

Miss

WHEELER'S SEED BOOK

FOR
1913

Dakota Improved Seed Co.
MITCHELL, SOUTH DAKOTA.

A Big Garden For One Dollar

OUR GREAT PROOF OFFER

30 Choice Varieties of DISCO Guaranteed Seeds—\$2.00 Worth for Only \$1.00

Wheeler's Model Garden Collection

Use Order Blank on Page 7 When Ordering

1/2 pint Beans, one of the best wax-podded bush varieties	.10	1/2 pint Sweet Corn, Golden Bantam	.10
1 pkt. Beet, Crimson Globe or Crosby's Egyptian	.05	1 pkt. Parsley, Extra Moss Curled	.05
1 pkt. Cabbage Eureka, Early Jersey Wakefield or Charleston Wakefield	.05	1 pkt. Parsnip, Hollow Crown or Improved Guernsey	.05
1 pkt. Cabbage, Danish ball head or Hollander	.05	1/2 pint Peas, one of the best early varieties	.15
1 pkt. Carrot, Oxheart or Chantenay	.05	1 pkt. Pepper, Ruby King or Bull Nose	.05
1 pkt. Celery, Golden Self-Blanching or White Plume	.05	1 pkt. Pumpkin, Small Sugar or Pie	.05
1 pkt. Cucumber, Improved Early White Spine	.05	1 pkt. Radish, Rosy Gem or French Breakfast	.05
1 pkt. Lettuce, California Cream Butter	.05	1 pkt. Radish, White Icicle	.05
1 pkt. Lettuce, Prizehead or Morse	.05	1 pkt. Rutabaga, Purple Top Yellow	.05
1 pkt. Muskmelon, Rocky Ford or Burrell's Gem	.05	1 pkt. Squash, Improved Hubbard or Golden Hubbard	.05
1 pkt. Watermelon, Fordhook Early or Kleckley's Sweet	.05	1 pkt. Tomato, Thornber or Early June	.15
1 pkt. Onion, Large Red Globe or Large Red Wethersfield	.05	1 pkt. Tomato, Yakima or Dakota Farmer	.10
1 pkt. Onion, Prizetaker or Yellow Globe Danvers	.05	1 pkt. Turnip, Purple Top Strap Leaf	.05
		1 pkt. Four O'clock, Mixed Colors	.05
		1 pkt. Nasturtium, Finest Dwarf Mixed	.05
		1 pkt. Pansy, Disco Mixture	.10
		1 pkt. Portulaca, Mixed Colors	.05
		1/2 oz. Sweet Peas, Disco Special Mixture	.10
			\$2.00

Sent Prepaid to Any Address in the U. S.

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.

**DAKOTA IMPROVED
SEED CO.
Mitchell, S. D.**

Sixth Annual Catalog of

Just a Few Words In Presenting This Book

It gives us much pleasure to publish this, the sixth annual seed book of the Dakota Improved Seed Company. The fifth milepost in our career has been successfully passed and we are now entering on the sixth, feeling that we are more firmly entrenched in the regard of friends and patrons than ever before—not because of who or what we are, but because of what we have accomplished for the benefit of agricultural interests in the great Northwest.

Our old friends and customers are by this time pretty well acquainted with our aims and our methods of doing business. To them we extend our most sincere thanks for the hearty support that has enabled us to bring this concern to its present state of efficiency in serving the people of the Northwest with improved seeds. It is hardly necessary to deal in personalities or history as far as our old customers are concerned, but for the benefit of those who have never dealt with us we wish to say a few words about

Who We Are and What Our Object Is

The Dakota Improved Seed Company was organized in November 1906, having for its direct object, as the name implies, the **improvement** of seeds for farmers and gardeners of the Northwest.

There was much agitation previous to this toward improved grains and corn, and it appeared that a seed company with high ideals and practical business methods would be able in the Dakotas to produce and sell high grade seeds especially adapted to conditions prevailing in this particular territory. Hence the organization of this company.

Over thirty prominent farmers and others interested in agriculture joined hands in this enterprise to put it on its feet. The two men who primarily used their influence and prestige in the organization of the company were Isaac Lincoln of Aberdeen and M. F. Greeley, editor of the Dakota Farmer of Aberdeen. These two men, in consultation with W. A. Wheeler, who is now secretary and manager, started the ball rolling and organized a company.

Mr. Wheeler assumed active management of the company from its beginning, and his efforts have been the most potent factor in its upbuilding.

In the fall of 1910 Mr. W. S. Hill was elected president of the company, and since then has been and will continue to be actively associated in the work, and will do everything in his power toward the upbuilding of the company and of carrying out its ideals and purposes.

Since the organization of the company it has endeavored to promote the interests of agriculture throughout the Northwest, and offer only those seeds which would be considered desirable and adapted for the region in which they are grown. It has endeavored to offer improved varieties of corn, alfalfa and other seeds, and the efforts in this direction have been productive of good results. It has not been possible to accomplish everything along the seed line in so short a time, but it has been, and will be, the aim of this organization to follow along the line of improved seeds and endeavor to bring about still greater results.

Therefore, with the above goal in mind, we present this, our sixth annual catalog, with our assurance that your orders will be given not only prompt but intelligent attention.

Dakota Improved Seed Company

Mitchell, South Dakota

J.T. Morrow, Vice President
Vice President Commercial and
Savings Bank of Mitchell.
Treasurer Board of Trustees
Dakota Wesleyan University

W.S. Hill, President and Treasurer
Pres. S. Dakota State Board of Agriculture
Pres. Security Natl. Bank of Alexandria
Chairman Better Farming Committee of the
S. Dakota State Bankers' Association
Capt. Sec. of River View Ranch in Hanson Co. S.D.
and of River View Herd of Red Polled cattle

W.A. Wheeler, Secretary and Manager
1900-1903 Instructor in Botany, School and
College of Agriculture, University of Maine
1905-1907 Botanist of S. Dakota Agricultural
College and Experiment Station

A.E. Hitchcock, Director
Pres. Board of Regents
Education of South Dakota
Member of Mitchell

Isaac Lincoln, Director
Pres. S. Dakota Board of Agriculture
First State Bankers' Association
Member Better Farming Comm.
of S. Dakota Bankers' Assn.
Pres. Lincoln Branch
of S. Dakota Bankers' Assn.
and Lincoln Branch
of S. Dakota Bankers' Assn.

Officers and Directors of the Dakota Improved Seed Co.

Mitchell, S. D.
Incorporated 1906

These men direct and control
the policy of this company.
Aside from their direct inter-
est in the Dakota Improved Seed
Co., each and every one of them
is directly interested in the agri-
cultural institutions and welfare
of the Northwest.

Read Our Guarantee

The guarantee on the opposite
page is not an ordinary guarantee
that means nothing and will not
protect the purchaser of seeds. We
will do exactly what we promise in
this guarantee. Read it over. It
tells you plainly what to do to
protect yourself against poor seeds.

S.E. Morris, Director
Pres. Western National Bank
of Mitchell S.D.
Pres. Board of Trustees
Dakota Wesleyan University

L.R. Erskine, Director
Prominently interested in
the Better Farming Movement in
South Dakota
Pres. of the Royal Plantation & Chicago

GUARANTEE

THE Dakota Improved Seed Company guarantees the seeds it sells to be as represented as to quality and germination. The Company will replace any seeds or refund the money on any seeds sold by it that prove to be otherwise.

It shall be the duty of the purchaser of goods sold by the Company in order to claim the benefits of its guarantee:

1. To order seeds early.
2. To inspect shipment carefully on arrival and report anything that appears wrong.
3. To take samples of all important bulk seeds in shipment. This applies particularly to seed corn, grass and clover seeds, and other main-crop seeds.
4. To test portion of sample for germination or send sample to U. S. Government Branch Laboratory, Columbia, Mo., or to your State Experimental Station.
5. If results of these tests are not as represented or are not satisfactory, to report this to the Company and adjustment will be made accordingly.
6. To make complaints, if any, as soon as the fact on which complaint is made can be determined. Complaints on the germination of seed corn must be made within two weeks after shipment is received and must be accompanied by an average sample of 100 kernels of corn taken from the unsatisfactory lot. Field results as to germination and purity may be referred to in making complaint but must not be depended upon as basis for settlement because field conditions are beyond the Company's control.

The Company will not insure a crop from seeds purchased as to description and productiveness because of the many factors which influence a crop and which are entirely beyond its control.

In no case will the liability of the Dakota Improved Seed Co. exceed the price paid for the seed purchased of the Company.

We the undersigned, officers and directors of the Dakota Improved Seed Co., of Mitchell, South Dakota, do hereby represent that the above guarantees have been made with and by the authority of the Board of Directors and that the credit of said Company is pledged to the fulfillment of this contract.

W. S. Hill

President and
Treasurer

Ernest Lincoln

Director

J. H. Morrow

Vice-President

L. R. Eshkine

Director

W. A. Wheeler

Secretary and
Manager

A. E. Hitchcock

Director

M. M. M.

Director

Dakota Improved

Seed Company

Please Read Before Ordering

When orders are received from this catalog the Dakota Improved Seed Company assumes that the customer has read this page before placing his order.

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 8 cents per pound. The smallest charge by express is 10 cents. If you are located near an express office and your shipment weighs twenty ounces or more it is better to ship by express, as it is safer.

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 \$1.

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 10 cents per ear is made to cover cost of mailing. Samples of corn shelled and graded are sent free. When orders are placed from samples always give sample numbers with the order.

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 inclosed 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—On page 80 of this book is a table of freight rates on seeds from Mitchell to various parts of the United States. This is intended to assist the customer in determining the approximate cost of freight to his station without the trouble and delay often caused by waiting to secure this information from the railroad company.

Prices in this book are subject to change without notice—The prices quoted are based on the conditions prevailing at the time this book goes to press. Except with grass and clover seeds, we seldom find it necessary to deviate from these prices during the season, and we do not raise prices unless we find it necessary. If you desire to place an order for items on which the prices are likely to fluctuate or for large amounts of any seeds, it is better to write for firm prices before ordering, same to be good for immediate acceptance. Prompt attention will be given requests for quotations.

Insure your packages against loss or damage by mail—We have made arrangements with an insurance company to insure packages sent by mail at the following rates: Three cents insures a package up to \$5; 5 cents up to \$15; and 10 cents up to \$30. If you wish your packages insured please include the amount required and we will send you fully this value in extra seeds. You therefore get this insurance absolutely free.

Premium—On any order for seeds priced per packet, ounce, fraction of an ounce or third-pint, to the amount of \$1 or more, we allow a premium of 25 cents' worth of seeds for each \$1 sent with order. This means that for every \$1 sent for such seed, \$1.25 worth of seeds may be selected by you when ordering. This premium will not be allowed on Model Garden Collections or other special collections.

PREMIUM

Of 25 cents' worth of seeds extra on each \$1 sent with order.

Does NOT apply on Wheeler's Model Garden Collection or other special collections offered at less than regular catalog quotations.

Does NOT apply on bulk seeds.

DOES apply on all orders of packets, ounce, fraction of an ounce, and one-third pint.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

Order Sheet for Seeds, Etc.

TO BE SENT BY
EXPRESS
 OR
FREIGHT

Date_____1913.

Dakota Improved Seed Co., Mitchell, So. Dak.

Gentlemen: Please send the following seeds, etc.,

by_____
[State here if wanted by express or freight.]

Name_____

Post Office_____

State_____ County_____

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

Nearest Railway Station_____
State here name of town to which goods are to be sent if different from P.O.

*Is there a freight agent at your railroad station?*_____

If there is no freight agent at your shipping point, you must send money to prepay the freight charges. (See table of freight rates on page 80.) If there is an agent you can pay the freight when shipment reaches you. It is only necessary to prepay when there is no agent at your station. The charges will be the same.

STATE AMOUNT ENCLOSED			
<i>Draft</i> . . . . .	.....	.....	
<i>Money Order</i> . .	.....	.....	
<i>Currency</i> . . .	.....	.....	
<i>Stamps</i> . . . .	.....	.....	
<i>Total</i> . . . .	.....	.....	
PLEASE DO NOT USE THIS SPACE			
<i>No.</i> _____			
<i>Filled by</i>	<i>Date</i>	<i>Checked by</i>	<i>How Shipped</i>

All orders listed at express or freight prices sent charges collect.

This order is placed subject to the guarantee and conditions of sale given on page 3 of Wheeler's Seed-Book for 1913.

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

Keep a Copy of this Order

Amount forward [over]

Cut Off On This Line

Dakota Improved **Seed Company**

We will consider it a special favor if you write below the names
of some of your friends who are likely to use seeds

NAMES	POST OFFICE	STATE

Order Sheet—(Continued)

Bus.	Lbs.	CROP	VARIETY	Amount Brought Forward		
		Buckwheat				
		Potatoes				
		Potatoes				
		Clovers				
		Clovers				
		Timothy				
		Grasses				
Total, - - - -						

REMARKS

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

Order Sheet for Vegetable and Flower Seeds, Etc.

TO BE SENT BY

MAIL

Date_____1913.

Dakota Improved Seed Co., Mitchell, So. Dak.

Gentlemen: Please send the following seeds, etc., by MAIL.

Name_____

Post Office_____

State_____ County_____

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

Do not fail to list this order at postpaid prices.

It is to your interest to have this shipment insured. See page 4.

STATE AMOUNT ENCLOSED

Draft . . . . .	.....	.....
Money Order . . . . .	.....	.....
Currency . . . . .	.....	.....
Stamps . . . . .	.....	.....
Total		

PLEASE DO NOT USE THIS SPACE

No._____

Filled by	Date	Checked by	How Shipped
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This order is placed subject to the guarantee and conditions of sale given on page 3 of Wheeler's Seed-Book for 1913.

QUANTITY	SEEDS OR OTHER ARTICLES WANTED	AMOUNT
	<div>Special Collections of Garden Seeds</div> <div>MARK YES or NO</div>	
	<div>Wheeler's Model Collection of Garden Seeds.</div> <div>30 varieties choice vegetable and flower seeds. Total catalog price \$2.00. See full list of varieties inside front cover.</div> <div>Special Postpaid Collection Price, \$1.00</div>	<div>Yes....</div> <div>No</div>
	<div>"Disco 50" Collection of Garden Seeds</div> <div>See page 43. 18 varieties choice vegetable and flower seeds. Total catalog price \$1.05. Special Postpaid Collection Price, 50c</div>	<div>Yes....</div> <div>No</div>
	<div>"Disco 25" Collection of Garden Seeds</div> <div>See page 43. 10 varieties choice vegetable and flower seeds. Total catalog price 60c. Special Postpaid Collection Price, 25c</div>	<div>Yes....</div> <div>No</div>
	<div>Disco Sweet Corn Collection. See page 53.</div> <div>¼ pint each of 4 choice varieties of sweet corn. Total catalog price 50c. Special Postpaid Collection Price, 25c</div>	<div>Yes....</div> <div>No</div>
	<div>"Disco Beauty" Collection of Flower Seeds. See page 37.</div> <div>20 varieties choice flower seeds. Total catalog price \$1.20. Spec. Postpaid Collect'n Price, 50c</div>	<div>Yes....</div> <div>No</div>
	<div>"Disco Junior" Collection of Flower Seeds. See page 37.</div> <div>12 varieties choice flower seeds. Total catalog price 60c. Spec. Postpaid Collection Price, 25c</div>	<div>Yes....</div> <div>No</div>
	<div>Disco Gladiolus Collection. See page 42</div> <div>One bulb each of 5 named varieties and one dozen bulbs assorted sent postpaid for 55c</div>	<div>Yes....</div> <div>No</div>
No Premium Allowed on any of the Above Collections		
Keep a Copy of this Order		Amount forward [over]

Cut Off On This Line

Dakota Improved

Seed Company

We will consider it a special favor if you write below the names of some of your friends who are likely to use seeds

[illegible]

Order Sheet—(Continued)

[illegible]

If more room is needed for list of seeds, attach another sheet of paper to this order blank for remainder of list.

Improved Seeds

For The Northwest

Our Specialty—Alfalfa

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 a much more

substantial form. This is the book we now offer as a premium to every purchaser of alfalfa seed.

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 with your order for alfalfa seed this year. Or send 25 cents for the book and you may have credit for this amount on your first order for alfalfa seed.

A GOOD WAY TO CURE ALFALFA

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 read our new book on alfalfa, which will be sent free on request with your order.

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.

Alfalfa Seed

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.

Our Superior Process of Cleaning

We have 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 now have 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 "Disco" brand and you will get seed that is right.

Commercial Alfalfa Seed

We exercise the greatest possible care in the purchase of our commercial stocks of alfalfa seed, and assure our customers that we have the best that can be obtained anywhere. The Disco, Emerald and Opal brands represent grades of quality in our seeds. The Disco is the finest there is and will always be scarce. The Emerald is a very good grade and is equal to the best grade often sold. The difference between the real value of this and the Disco brand is often only one of appearance, instead of a real difference in quality. The Opal is a lower grade, and we have very little of this grade to offer.

Bags included at these prices.		4 lbs.	20 lbs.	100 lbs.
Dakota Grown, Disco Brand.....		\$1.25	\$5.00	\$23.50
Dakota Grown, Emerald Brand.....		.....	4.50	21.00
Dakota Grown, Opal Brand.....		.....	4.00	19.50
Dakota Acclimatized, Disco Brand.....		1.35	6.00	28.00
Nebraska Grown, Choice.....		.....	4.00	19.50
Imported Turkestan, Fancy.....		.....	4.50	21.00
Imported Turkestan, Choice.....		.....	4.00	19.50

Disco-Seal Alfalfa

The crop of alfalfa seed produced in the vicinity of Mitchell in 1912 was very light. As all of our fields of pedigreed varieties are near Mitchell, the available supply of such seed is very limited. The demand for these varieties has always been far above the supply, and this year it will be impossible to do more than furnish a very small amount of seed to each customer as long as the stock holds out. In order to do this we are limiting the amount of seed that we will sell to any one customer to four pounds, except with the Disco-Baltic, on which ten pounds will be the limit to one customer.

These alfalfas are put up in sealed bags only of one, two, four and ten pounds each. Every bag will be sealed with the Disco Seal, which is your guarantee of the genuineness of the stock. If shipment is requested by mail the seal will have to be broken before mailing, in order to comply with United States postal rules for third-class matter.

Sold in sealed bags only.	Postpaid Prices		Exp. or Freight	
	1 lb. bag	2 lb. bag	10 lb. bag	10 lb. bag
Disco-Baltic	\$1.00	\$1.60	\$2.50	\$5.00
Disco-Baltic C. 12 or C. 13 or C. 25.....	1.00	1.75	3.00	7.00
Disco-Grimm	1.00	1.75	3.00	7.00
Disco-Grimm A. 11.....	1.00	1.75	3.00	7.00
Grimm, Montana Grown.....	1.00	1.75	3.00	6.00
Wheeler's Acclimatized Turkestan No. 1 or No. 2.....	1.00	1.60	2.50	5.00
Wheeler's Acclimatized Turkestan B. 1 or B. 2.....	1.00	1.75	3.00	7.00

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 have established 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.

Turkestan Alfalfa

The Dakota Improved Seed Company has not in the past handled imported Turkestan alfalfa because of the unusually good results that have been secured from our home-grown stocks, which were easily procured. This year we are listing imported Turkestan seed for several reasons.

First: Dakota grown seed of good quality is scarce this year and comparatively high in price.

Second: Turkestan alfalfa seed can be secured of good quality at reasonable prices.

Third: The agricultural experiment stations of the Northwest have been reporting favorable results from imported Turkestan alfalfa seed.

For prices of Imported Turkestan Alfalfa, see page 10.

Wheeler's Acclimatized Turkestan No. 1 or S. D. No. 240

The original seed of this alfalfa was brought from Tashkent, Turkestan, in 1898 by Prof. N. E. Hansen for the United States Department of Agriculture. It was sown at the Highmore (S. D.) 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 sixty-eight varieties, this ranked second in hardiness, the Grimm being first. These sixty-eight alfalfas were subjected to the most severe conditions on record at the station. Wheeler's Acclimatized Turkestan lost 9 per cent, while the second sample of Grimm lost about 7 per cent by winter-killing. In type of plant this alfalfa is very different from Baltic, Grimm and S. D. No. 164, all of which are very branching and have variegated flowers. No. 240 is a strong grower, with erect stems, heavy foliage and blue or purple flowers. It is one of the best hay producers and one of the poorest seed producers of our selected stocks. 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 10.

Wheeler's Acclimatized Turkestan No. 2 or S. D. No. 164

From the records of this alfalfa at the South Dakota Agricultural Experiment Station it has the same origin as S. D. No. 240. The records, however, are not perfectly clear, so there is some doubt as to the exact origin of this alfalfa. The type of plant is entirely different from S. D. No. 240. It resembles the Grimm very closely in color or bloom and type of plant. On our old seed farm near Mitchell we have a field of No. 164 growing between a field of Grimm on the one side and a field of No. 240 on the other. In this field No. 164 cannot be distinguished from the Grimm by any characteristics of the plant or in hardiness. Where the fields of No. 164 and No. 240 join, the line of demarcation is visible for a long distance, because of the great difference in type of plant. All of these stocks have demonstrated their hardiness in our tests here, as well as tests at both the Brookings and Highmore Experiment Stations. In addition to the general stock of this strain, we have a small amount of seed from two selections known as B. 1 and B. 2. These are showing up remarkably well in our plots. Prices given on page 10.

Grimm or S. D. No. 162 Alfalfa

So much has been written the last five or six 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, Minn., ever since its first introduction. It has been tested at nearly all the northern experiment stations in comparison with other stocks, and never, to our 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

The Most Profitable Crop on a Dakota Farm

\$1,008.30 paid for a single wagonload of alfalfa seed. This load of 5,931 pounds was produced on twenty acres of land in 1911 with thirteen inches of rainfall.

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 twenty pounds of almost any other stock. For prices, see page 10.

Hardest Alfalfa Varieties for North Dakota

The United States Department of Agriculture, in co-operation with the North Dakota Sub-experiment Station at Dickinson, N. D., 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 sources 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 that 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 35 per cent of their stand. These varieties, in order of winter resistance, are Grimm, Baltic, Wheeler's Acclimatized Turkistan, 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 Mr. Wheeler of this company.

Baltic or S. D. No. 167 Alfalfa

Our Mr. Whecier has been experimenting and working with the Baltic alfalfa for the past eight 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 north-western conditions.

Mr. W. F. Kelly of Renner, S. D., called Mr. Wheeler's attention to this alfalfa in 1904. After a single year's trial on the experiment plots at Brookings and Highmore he was

so struck with its desirable characteristics and apparent hardness at both places that he 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 he could harvest a few pounds of seed he 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

The Baltic has "Made Good"

Mr. Charles 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 hardest 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:	Pctge. of loss
Grimm, seven strains.....	4.7
Selected by Wheeler, six strains.....	5.8
Ordinary, three strains.....	34.5

Dry Land Alfalfa Seed

[See note at bottom of page]

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

Records at the North Dakota experiment stations, the Colorado station, and also at the United States Experiment Station at Belle Fourche, all show the Baltic to rank as one of the best stocks tried.

Mr. Wheeler remained at the South Dakota experiment station only three 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.

In addition to the general stock of Baltic, we have a very small amount of seed from three fields grown from individual plant selections. These are all giving a good account of themselves, and we list them as C. 12, C. 13 and C. 25.

Only Place Seed Can Be Secured

Aside from the small quantities of Baltic alfalfa seed sold by us during the past four years, and the original stock on Mr. Kelly's farm, there is no Baltic alfalfa of known origin and record in the country today 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. The small amount of seed we have this year is of very choice quality and high germination. For prices of Baltic alfalfa, see page 10.

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 January 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 five bushels, giving a financial return at market values of over \$50 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 three bushels, returning over \$30 per acre.

BE SURE TO READ OUR MONEY-BACK GUARANTEE ON PAGE 3.

Dakota Improved

Seed Company

Prize Cup for Winner in State Corn Contest

Prize Cup for Winner in Each County Contest

Prize Cups for Boys

Offered by the Dakota Improved Seed Company, Mitchell, S. D.

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 in South Dakota we offer a beautiful silver cup like the smaller one shown above to the boy in each county exhibiting the best ten ears of corn.

This silver trophy cup stands eleven inches high and is beautifully engraved in corn. The name of the winner each year will be engraved on the back of cup. The cup must be won three years by the same boy to become his permanent property.

The large cup shown above goes to the winner of the boys' contest at the state corn show. This cup stands twenty-two inches high and is beautifully embossed and engraved with the leaves and ears of corn.

The competition for this trophy is open to the boy in each county of South Dakota who wins in the county corn contest conducted by the county superintendent of schools. In counties where no school contest is being held any boy 16 years of age or under who has grown the corn for his exhibit and has complied with the rules of the South Dakota Corn and Grain Growers' Association may compete for the trophy. It must be won three years to become the permanent property of any one exhibitor.

The photograph above, on the left, is Ernest Sorenson of Elk Point, S. D., the first winner of the Boys' Champion Trophy.

Grand Sweepstakes Corn Trophy

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

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

Most of our corn is selected first at the time of husking. This

CORN CULTURE IN THE NORTHWEST

A Valuable Book for Every Corn Grower

By W. A. WHEELER

We have published this book, believing that corn growers would be interested in learning more about our several years of experimenting and careful selection of varieties of corn that are best adapted to the varying conditions that exist in different localities.

What we have to say in this book is right to the point and does not contain a lot of generalities that must be waded through in order to get to the real meat of the subject. On the other hand, a careful study of the contents of this book will save farmers a lot of unnecessary, expensive experimenting, worry and poor crops.

A copy of this book will be sent free of charge with every order of seed corn placed with us this season, but we want every buyer of seed corn to have a copy of this book, and have arranged to send copies to any one sending us the names and addresses of five other farmers interested in seed corn. Just send us your name and address, plainly written, together with five others, and we will see that a copy is sent to you immediately, postage prepaid.

first selection usually 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 handled in the best manner possible to remove the surplus moisture and put it in good seed condition. When it is prepared for shipment or for the sheller, 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 ventilated bins in a dryhouse built specially for the storing and curing of seed corn. This is given a second selection at the time it is prepared for shipment. Most of our corn is, therefore, selected on the ear at least twice, and much of it three times, before it is shelled or shipped.

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. In ordinary seasons seed corn is not considered as satisfactory to be shipped unless it shows a strong germination of over 90 per cent. Most of our stocks show tests of from 95 per cent to 100 per cent. 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.

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. At times, on special stocks of corn, we find it necessary to ship ear corn in crates or bags, but we plan to ship in wire-bound boxes whenever it is possible to do so.

Box of Ear Corn Packed for Shipment

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 per cent to 40 per cent 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 are 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.

Right here let us say that the grading of early varieties of corn is often a difficult proposition. The kernel found in early varieties is usually rather short and somewhat rounded, instead of long, wedge-shaped and flat, as found in the later southern types. For this reason it is practically impossible to do more than grade for size by removing the smaller tip kernels and the larger butt kernels.

In planting seed corn of the earlier varieties the round hole plate planters are usually more successful than the edge drop planters.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

BE SURE TO READ OUR MONEY-BACK GUARANTEE ON PAGE 3.

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 hardier 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.

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 partly matured. The extra vitality and growth secured by our method more than offsets 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 a 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 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 five bushels per acre at 30 cents per bushel is worth \$9.

Seed corn which costs \$3 per bushel must produce, in order to pay for itself, one bushel more of corn per acre than seed corn that costs \$1 per bushel.

The loss on a bushel of seed corn which gives a 50 per cent stand is from \$10 to \$15 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 per cent on the extra cost of well graded seed.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

BE SURE TO READ OUR MONEY-BACK GUARANTEE ON PAGE 3.

Dakota Improved **Seed Company**

Brown County Yellow Dent Corn

The Earliest, Hardest and Most Drouth-Resistant Dent Corn

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 eighteen or twenty years. It has been tested at the Highmore Experiment Station, where it yielded between forty-five and fifty bushels per acre. In 1907, at the same experiment station, this corn outyielded 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 for uniformity of type and shows quite a variation in color and shape of kernel. This, however, does not

Brown County Yellow Dent

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 eighteen or twenty years. Our stock is very good. Germination tests on this stock are running from 93 to 97 per cent at the time this catalog goes to press. We offer it shelled and graded per bushel, \$3; four bushels or over, \$2.75 per bushel. Bags included.

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, Neb.

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 4 until August 13—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 13 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 ninety-ninth meridian. Yours respectfully,

H. H. STONER.

Highmore, S. D., January 16, 1909.

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.

Payne's White Dent**Early Pride Corn**

Early Pride has a better and more uniform type of ear and kernel than the Brown County Yellow Dent and is a few days later. The ears run quite uniformly yellow, while the ears of Brown County Yellow Dent range from light yellow to almost red. In yield they are about the same. We can recommend this to go almost as far north as the Brown County variety. Bushel, shelled and graded, \$2.50; four bushels or over at \$2.25 per bushel. Bags included.

Payne's White Dent

An extremely early white dent corn, about the same season as Early Pride. We consider this a very desirable white corn for the northern part of the state. The two years that Mr. Payne exhibited this corn at the state corn show it took first premium over all other white corn in the northern district, and one year took sweepstakes over yellow and all other kinds in the same district.

We have only a limited supply of this variety this year, owing to our losing almost our entire seed stock in 1911. While it lasts, per bushel, shelled and graded, \$2.75; four bushels or over at \$2.50 per bushel. Bags included.

Rustler White Dent

A well known early variety of white corn. Largely grown in central Minnesota and South Dakota. About the same season as Minnesota No. 13. It is a strong grower and a good yielder. We have an extra fine stock of seed of this variety this season. It is very well matured and in the very best of seed condition. For central South Dakota one cannot go wrong in using this seed. Per bushel, shelled and graded, \$2.50; four bushels or over at \$2.25 per bushel. Bags included. On the ear, in box or crate, \$3 per bushel.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

BE SURE TO READ OUR MONEY-BACK GUARANTEE ON PAGE 3.

Dakota Improved **Seed Company**

Northwestern Dent Corn

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. No other variety seems to have given the uniformly satisfactory returns in North Dakota that are given by the Northwestern Dent.

The ears are of fair size, rather long and slender. The type of ear is intermediate between a flint and a dent corn. They are usually from seven to nine inches long and have from ten to fourteen rows of kernels.

The kernel is red with a yellowish cap, but there is a great variation in the colors of the kernels as well as in the type. The true type should have a slight dent, but the ears show a great variation in this respect.

This corn is too popular throughout the Northwest to need any further recommendation from us. It is the standard early corn in North Dakota and will probably retain its popularity for years to come. Bushel, \$3; four bushels or over at \$2.75 per bushel. Bags included.

Vice-president Morrow Inspecting Fields of Northwestern Dent Corn

Minnesota No. 23

An early strain of the standard White-Capped Yellow Dent. Originated on a farm in northwestern Minnesota and introduced by the Minnesota Experiment Station after several years' trial. Recommended by that station as probably the best extremely early variety for northern Minnesota. Records of over seventy-five bushels per acre have been secured in Minnesota, northwest of the Twin Cities.

Minnesota No. 23 is being grown quite extensively in North Dakota and is "making good." We can recommend it for that state or for northern South Dakota. Bushel, \$2.50; four bushels or over, \$2.25 per bushel. Bags included.

SPINK COUNTY, S. D.

I have been farming in South Dakota and raising corn all my life and never had corn grow and do any better than the seed corn bought of your firm.

We have had rather an unfavorable season and the cutworms took considerable of the general average of my stand.

Had we had a favorable season, believe my corn would, on the whole 250 acres, have averaged sixty to seventy-five bushels per acre. As it is, I think I will get about forty bushels of good, solid corn per acre.

The Yellow Dent seemed to ripen the best for me. If I need any seed corn next year you certainly will get my order.

M. F. AKIN, Spink County, S. D.

GREGORY COUNTY, S. D.

I got a box of your seed last year and it grew fine and I raised most of my seed from it.

PETER T. NELSON, Route No. 2, Gregory County, S. D.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

BE SURE TO READ OUR MONEY-BACK GUARANTEE ON PAGE 3.

Disco-White Dent

This very valuable variety was listed by us for the first time in 1911, but, owing to the very unfavorable conditions for seed corn production in 1911, we had very little to offer.

The Disco White Dent has been grown by Mr. Robert Dailey of Moody County, S. D., for several years. Mr. Dailey reports it to be earlier than Minnesota No. 13, a better type of corn, and a better yielder. Whether this comparison of earliness will hold good in all other localities and under varying conditions remains to be determined by trial.

Disco White Dent

From observations we have made the past two seasons, we feel perfectly safe in recommending it as a general crop for the latitude of central South Dakota and southern Minnesota. Possibly further tests will prove that this corn can be taken farther north than Huron and Brookings, but we do not wish to make recommendations until we know.

We haven't handled a variety of corn that we have been more enthusiastic over than the Disco White Dent. It is more than meeting our expectations. Besides being early, the ears are good size and kernel is deep and well shaped. The photographs of this corn on this page show what the corn is. Notice the shape of the ear, the well filled butts and tips, the good type of kernel. In fact, it is hard to pass an unfavorable criticism on this variety.

For years the farmers of southern Minnesota and South Dakota have been clamoring for a white corn that they could tie to. In the Disco White we have just what you want.

Besides taking first premium at the South Dakota corn show for several years, and first at the South Dakota state fair in 1912, this corn has won honors in other places and never has had to take a back seat in any place under fair competition.

Our seed this year has been grown by Mr. W. S. Hill of this company on his Riverview Ranch in Hanson County. It is all well matured and of good quality in every respect. Per bushel, shelled and graded, \$2.50; four bushels or over at \$2.25 per bushel. On the ear, per bushel, \$3. Bags included.

Silver King and Minnehaha White

Our stocks of both of these valuable white varieties are rather uncertain at the time our catalog goes to press. We expect to have some of both of these to offer and request that any one interested in these two, or other of the larger eared white kinds, write to us about them.

Minnesota No. 13 Corn

Minnesota No. 13 Corn

This corn needs no recommendation from us. Any one 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 forty to ninety bushels per acre; fifty bushels per acre is an average yield. One field of this strain, at Mitchell, in 1903, produced good, ripe corn in eighty-seven 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.

In our strain of Minnesota No. 13 we endeavor to retain the earliness of the true variety by getting the seed for our own planting either directly from the Minnesota Experiment Station or from one of their accredited growers each year. We thus preserve the type of the experiment station strain as nearly as possible, which would not be the case if we continued to raise this variety in the vicinity of Mitchell or south of here from the same stock year after year.

Per bushel, shelled and graded, \$2.50; four bushels or over at \$2.25 per bushel. Bags included.

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.

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 1,360 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 hundreds 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 here comes nearer meeting our needs for this 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 has 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, \$2.50; four bushels or over, \$2.25 per bushel. Bags included.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

BE SURE TO READ OUR MONEY-BACK GUARANTEE ON PAGE 3.

Early Murdock Corn

Exceptionally Good Variety for Northwest

In offering the Early Murdock corn we have a variety that has for the past twenty or more years been developed for earliness and yield. We think it more nearly meets our ideas of the ideal corn for southern Minnesota and South Dakota and northern Iowa 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

Early Murdock

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 five 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.

Our stock of Early Murdock corn for this season has a germination test of over 90 per cent. This germination is a strong germination, and does not include weak sprouts. From a careful observation and estimate of the cornfields 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 and 1912 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 1911 and 1912 and supply other varieties or cancel the orders altogether.

We do not especially recommend the planting of this variety of corn much 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 do not feel fully safe in recommending it very much north of this latitude.

Prices: We have a very good stock of Early Murdock this season. We offer it, shelled and graded, at \$2.50 per bushel; four bushels or over at \$2.25 per bushel. Bags included. On the ear, \$3 per bushel in any quantity.

What Others Think of Early Murdock

You sent me one bushel of Early Murdock corn. It is better than my other corn. It grew good and is the best crop I ever raised.
D. C. BROOKS, Myron, Minn.

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 10. It d'd fine and got ripe, too.
J. D. VROOM, Howard, S. D.

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, \$1.50; four bushels or over at \$1.25 per bushel.

Medium Fodder Corn—Includes varieties like the Early Murdock and others of this season. Per bushel, \$1.50; four bushels or over at \$1.25 per bushel.

Early Sweet Fodder—Very fine for early feed. Sow broadcast or in drills. Peck, \$1.10; ½ bushel, \$2; bushel, \$3.50.

Evergreen Sweet Fodder—Tall growing, sweet corn, producing a large weight of foliage and stalks per acre. Peck, \$1; ½ bushel, \$1.75; bushel, \$3.

Bags included at above prices.

Second Grade Seed Corn

In handling and cleaning our varieties of seed corn it often happens that some portions of our choice lots have to be kept out because of some accidental mixture of other varieties. This sometimes amounts to 5 per cent of the lot, but oftener it is only a trace. Because of this mixture we cannot offer these lots as first grade seed corn. They represent the same stocks and germination as first grade corn, and for many purposes are equally good.

Whenever we have these in stock we will offer them at the same prices as given for fodder corn above. When ordering give first and second choice of variety, for our supply of any one variety will be limited. We will probably be able to furnish more of Brown County Yellow Dent, Minnesota No. 23, Northwestern Dent, Early Pride and Disco Flint than of the other varieties listed.

Several Exhibits of Disco Guaranteed Seeds

Disco-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.

The "Disco Flint" is a variety that has been bred to overcome the undesirable traits of some of the other varieties of flint corn. It is a good yielder, producing from thirty-five to forty-five bushels per acre under ordinary conditions. It has a fair sized ear and carries it well up on the stalk, while most other flint sorts produce the ear on the extreme lower part of the stalk, thus making it a back-breaking job to husk the corn. The stalks are good height, leafy, and ordinarily produce two good ears to each stalk.

In breeding for the above desirable qualities, earliness has not been lost sight of. In fact this variety is even earlier than most other flint varieties and almost as early as the Gehu. In the race for maturity the past season it tied the Brown County Yellow Dent for first place.

The Disco Flint is called a yellow variety, but most of the ears have a reddish cast and some are almost red at the tip, like the old Smut Nose Flint, so well known in the North.

We can heartily recommend this variety of flint corn, for we know its breeding and have tested it under varied conditions.

Per bushel, shelled and graded, \$3; four bushels or over, \$2.75 per bushel.

Longfellow Flint—An eight-rowed yellow flint variety, well known almost everywhere in the north. A good yielder and very popular. Per bushel, \$2.75; four bushels or over, \$2.50 per bushel.

Gehu Flint—Probably the earliest variety of flint corn. Ears small, short, yellow in color. Recommended for the extreme north, where other kinds will not mature. Per bushel, \$3; four bushels or over at \$2.75 per bushel.

Squaw Flint—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. Per bushel, \$3; four bushels or over at \$2.75 per bushel.

Bags included at above prices.

Flint Corn

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

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Minnesota No. 169 Wheat

Averaged Over 38 Bushels per Acre in 1912

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 three to five bushels more per acre than the common varieties. In the eastern half of South Dakota it has yielded well and has also become very popular. For any one 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. Our stock this year is from a field that averaged over thirty-eight bushels per acre. The quality of this seed is excellent and we can offer it at the following extremely low prices for this kind of seed: Per bushel, \$1.50; per sack of 2½ bushels, \$3.25; four sacks or more at \$3 per sack. Bags included.

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 two to ten 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 thirty-five to forty bushels per acre in seasons when the best bread varieties yielded from twelve to eighteen. Per bushel, \$1.50; per sack of 2½ bushels, \$3.50; four sacks or more at \$3.25 per sack. Bags included.

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 1.

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 pounds, \$1; 100 pounds, \$2; 500 pounds or over at \$1.85 per hundredweight. Prices subject to change.

**Heads of Emmer or Speltz.
Very Similar to Wheat Heads.**

Sixty-Day or Kherson Oats

Outyields All Others in 1912

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 are a good seeding. We think this is plenty for the south, but some recommend two and a quarter to two and a half bushels per acre.

Sixty-Day and Swedish Select Oats

Field of Swedish Select Oats in Foreground, with Harvested Field of Sixty-Day Oats in Background.

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. Yields of from 75 to 100 bushels of Sixty-Day oats per acre were very common in 1912. Isaac Lincoln of Aberdeen raised over 8,400 bushels from 100 acres last season.

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, hailstorms 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 100 bushels of most standard varieties.

It leads all varieties commonly grown in weight per bushel.

Prices: Single bushel, 90 cents; sack of 2½ bushels, \$1.75; four sacks or more of 2½ bushels each at \$1.70 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 toward 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.

Barley

The state of Wisconsin has a reputation for barley and barley products. This does not mean that it produces the most barley of any state, for this reputation is one of quality, not quantity. The Wisconsin and Minnesota experiment stations have both been doing considerable work in the development and introduction of new and pedigreed varieties of barley. We are offering two varieties, both of which are giving excellent returns in South Dakota, as well as in the states where they originated. South Dakota is among the three or four largest producing barley states, but too little attention has been given

Wisconsin No. 13 Barley. Upper Photo Shows Rows Grown for Selection at the Wisconsin Experiment Station

to the quality of the grain produced. Every farmer who grows barley should secure a few bushels of pedigreed seed to start with and increase it as fast as possible. There is none better than the two following:

Wisconsin Pedigree No. 13—One of the best six-row barleys ever produced. The above photographs show a field of this variety, the breeding plots where it was developed, and two groups of heads. Our stock of this is very good. Per bushel, \$1.75; per sack of 2½ bushels, \$3.75; four sacks or over at \$3.50 per sack. Bags included.

Minnesota No. 105—This variety has been tried for a number of years in both Minnesota and South Dakota and holds first rank among the six-row varieties in both states. Prices same as for Wisconsin No. 13.

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; five bushels or over at \$1.50 per bushel. Bags included.

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 have 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 Mr. Wheeler in 1904.

Millet. Head of Black Voronezh and Field Showing Rows of Kursk Millet Grown for Selection

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 rather poor quality. Our stock of Kursk millet has been in demand by seedsmen all over the Northwest. Prices for Disco brand seed: Per bushel of 50 pounds, \$1.75; per sack of 2½ bushels, \$3.50; four sacks or more at \$3.25 per sack.

SIBERIAN MILLET—This is the same type of millet as the Kursk. In fact, the Kursk millet is a special importation of this millet from Russia. Our Dakota Selected Kursk is a pedigreed Kursk stock. What has been said of the adaptability of Kursk millet to the Northwest applies to a large extent to the regular Siberian millet. Per bushel, \$1.40; per sack of 2½ bushels, \$3.25; four sacks or more at \$3 per sack.

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 of excellent quality. 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, \$1.10; per 100 pounds, \$2.60.

BLACK VORONEZH MILLET—This is a variety of broomcorn millet imported by the United States Department of Agriculture in 1898. 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 twenty to fifty bushels per acre of very valuable grain. Prices same as for Kursk millet.

EARLY FORTUNE—This is one of the broomcorn type of millets similar to the Black Voronezh, except in color of seed, which is red instead of black. This is grown more generally in North and South Dakota than the Black Voronezh. Prices same as for Kursk.

Bags included at above prices.

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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

Rape Sown in Corn at Last Cultivation

Rape Sown with Small Grain for Fall Pasture

are thousands of acres of land sown to small grains that could be made to yield an abundant fall pasture by the sowing of two 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 two to six pounds, depending upon the way it is handled. When sown alone, from five to six pounds are recommended. When sown with small grain, two to three pounds.

Prices—Pound, postpaid, 25 cents. By express or freight, at purchaser's expense—5 pounds, 60 cents; 10 pounds, \$1; 25 pounds, \$2.25; 100 pounds or over at \$8 per 100 pounds. Bags free.

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 a good grade of seed, Minnesota and Montana grown, as follows: Per bushel, \$3.25; ten bushels or more at \$3 per bushel. Bags free. Prices subject to change. Write for latest prices when seed is wanted.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

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Dakota Improved **Seed Company**

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. We 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 United States Department of Agriculture Seed Testing Laboratory or to his state experiment station 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, Mo. 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, Mo.** 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 us of the old-time farmer with his team made up of a colt and a 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 evener, 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 evener in proportion to the pulling power of the horses; that is, one-third the length of the evener 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, we at one time had a large stock of Kentucky blue grass on hand which tested 91 per cent pure and showed a germination test of 83 per cent. Now, what does this mean? It means that 91 per cent of seed was Kentucky blue grass and that 83 per cent of this 91 per cent would grow. By computation we find, then, that just about 75 per cent of the total weight was germinating seed. For Kentucky blue grass this is 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 per cent of the seed was Kentucky blue grass seed; the germination test showed that 58 per cent of the Kentucky blue grass seed that was present would grow. By computation we find, then, that 37 per cent or 38 per cent 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 2 or 3 cents.

Sow Only Clean Seeds

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 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 now 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 "Disco" brand and you will get seed that is right.

Our **Disco** Brand
GUARANTEED SEEDS

Our Disco 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 Disco brand it is necessary for us to handle other grades not quite equal to the Disco. These will all be good seeds and well worth the price, but they will not be equal to the Disco brand. We guarantee seeds sold under the Disco brand.

The Emerald and Opal brands represent other grades of quality in our seeds. The Disco is the finest grade there is and will always be scarce. The Emerald is a very good grade and is equal to the best grade often sold. The difference between the real value of this and the Disco brand is often only one of appearance instead of a real difference in quality. The Opal is a lower grade, and we usually have very little of this grade to offer.

Clovers—A Cheap Fertilizer

Upper Photo, Clover Seeded in Rye

Nodules on Roots of Medium Red Clover

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. In experiments conducted by the Minnesota Experiment Station it has been shown that the sowing of six pounds of clover seed with every acre of wheat increased the yield of wheat 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. We 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 is far better than sowing the grain alone.

Sow Only Northern Grown Seed

We have tested over fifty stocks of red clover seed in South Dakota and find that seed from northern sources is 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 without notice. Those quoted below are based on present market.

DISCO **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 Disco standard. We handle only northern grown seed. Prices subject to change. Disco, bushel, \$15; 100 pounds, \$25. Emerald, bushel, \$14.25; 100 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. Disco brand, bushel, \$15; 100 pounds, \$25.

WHITE OR DUTCH CLOVER—Used in lawns and pastures. Disco brand, pound, postpaid, 65 cents. By express or freight—pound, 55 cents; 20 pounds \$9.50.

ALSIKE AND TIMOTHY MIXED—We will be pleased to mail samples and quote prices on these in varying proportions at any time.

SWEET CLOVER—The experiment stations of some of the central and northwestern states are recommending sweet clover for hay and pasture, as well as a soiling crop. We usually have seed of both the white-flowered and the yellow-flowered varieties. Per pound, 25 cents; 10 pounds, \$2.25; larger quantities at 20 cents per pound.

Bags included at above prices.

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 are used.

Our Disco 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 Disco lawn grass mixture, per pound, postpaid, 40 cents. By express or freight—5 pounds, \$1.40; 10 pounds or over at 25 cents per pound.

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. Kentucky blue grass seed of poor or uncertain quality can be bought at a much lower price than we charge for our Disco brand. We purchase the very choicest seed obtainable, regardless of price. Price per pound, postpaid, 35 cents. By express or freight—5 pounds, \$1.25; 10 pounds or over at 20 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 1912 was very favorable for the production of timothy. Good seed is more plentiful than it has been for three years and prices are consequently lower. 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: Disco brand, per 100 pounds, \$5.75; small amounts at 6 cents per pound. Emerald brand, per 100 pounds, \$5.25; small amounts at 5½ cents per pound. Single pound, postpaid, 20 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. Any one 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, \$3; 100 pounds or more at 13 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 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 on page 72.

Bags included at above prices.

BE SURE TO READ OUR MONEY-BACK GUARANTEE ON PAGE 3.

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—ounce, 5 cents; pound, 50 cents. By express or freight—pound, 40 cents; 5 pounds or over at 30 cents per pound.

Sugar Beets

KLEIN WANZLEBEN—This variety is perhaps more extensively grown than any other. It is well adapted for growing in the Northwest.

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—ounce, 10 cents; $\frac{1}{4}$ pound, 30 cents; pound, 90 cents; postpaid. By express or freight—pound, 80 cents; 5 pounds, \$3.75; 10 pounds, \$7.

Rutabaga

MONARCH—The best and highest yielding rutabaga grown. It usually yields from two to five 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—ounce, 10 cents; $\frac{1}{4}$ pound, 20 cents; pound, 50 cents; postpaid. By express or freight—pound, 40 cents; 5 pounds or over at 30 cents per pound.

Improved Rose No. 4 Potatoes

Potatoes

We have not specialized in the growing of potatoes to any extent, but have furnished our customers with some very good quality stock during the past few years. We haven't as yet the facilities we would desire for the handling of seed potatoes in large quantities.

Prices—We are not quoting prices when this book goes to press because of the very probable change in values before planting time. If interested, write for prices during the month of March and we will endeavor to supply you from the very best stock available at the most reasonable prices.

EARLY OHIO—The standard early variety and one that is hard to beat in the Dakotas.

EARLY DAKOTA—A comparatively new variety, similar to the Early Ohio, but usually somewhat earlier than that standard variety.

IMPROVED ROSE No. 4—Good quality, large, heavy yielder. One of the best medium late varieties we have tried.

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.

RURAL NEW YORKER—A standard general crop or late variety well known throughout the country. In many localities this is the most popular variety grown.

Potato Eyes By Mail

160 POTATO EYES OF ONE TO FOUR VARIETIES POSTPAID FOR \$1

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 forty potato eyes of one variety in each small box. Four small boxes make a large box containing 160 eyes. We can make this up all of one variety or of two to four varieties, just as the buyer may wish. We will ship one of these large boxes containing 160 eyes to any person, postpaid, for \$1. 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 two quarts flour, four quarts air-slaked lime and one pound paris green. Mix this with a little water and finally thin it to a bucketful, then pour into a barrel containing thirty 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.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

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 sweetcorn. 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.

Don't neglect the ornamental side of your place. Order one of the following collections and do what you can to make the home beautiful and attractive. The boys and girls will both take more interest in it.

"Disco-Beauty" Collection

Twenty varieties of choicest flower seeds.

Regular catalog price, \$1.20. Our special collection price, 50 cents.

Includes one regular size packet of each of the following:

Alyssum, Sweet Alyssum.
Asters, Queen of the Market.
Balsams, Double Camellia-flowered.
Candytuft, All Colors Mixed.
Centaurea, Imperialis Mixed.
Cypress Vine, Mixed Colors.
Dianthus, Double Chinese Pinks.
Eschscholtzia, Golden West.
Four-o'clock, Mixed Colors.
Hollyhock, Mammoth Allegheny.

Marigolds, Double Dwarf African.
Mignonette, Many Kinds Mixed.
Morning Glory, All Colors.
Nasturtiums, Dwarf, Mixed Colors.
Pansies, Fine Mixture.
Petunia, Fine Mixture.
Phlox, Fine Mixed.
Poppy, Special Double Mixed.
Portulaca, All Colors.
Verbena, Fine Mammoth.

"Disco-Junior" Collection

Twelve varieties of finest blooming annuals.

Regular catalog price, 60 cents. Our special collection price, 25 cents.

Includes one regular packet of each of the following twelve varieties:

Alyssum, Sweet Alyssum.
Balsams, Double Camellia-flowered.
Candytuft, All Colors Mixed.
Dianthus, Double Chinese Pinks.
Eschscholtzia, Golden West.
Four-o'clock, Mixed Colors.

Mignonette, Many Kinds Mixed.
Morning Glory, All Colors.
Pansies, Fine Mixture.
Petunia, Fine Mixture.
Portulaca, All Colors.
Poppy, Special Double Mixed.

Our list of flowers is not large, but we 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.

Flowers

AGERATUM—One of the best summer blooming plants grown from seeds.

Dwarf Blue Perfection—Plant nine inches high; flowers deep blue; 10 cents.

Imperial Dwarf White—Plant six inches high; fine for borders; 10 cents.

ALYSSUM—One of the easiest 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 condition.

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

Cyanus, Bachelor's Button—Very well known; excellent for cut flowers; all colors; 5 cents.

Imperial, Sweet Sultan—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 cts.

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—Present 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.

Flowers

FOUR-O'CLOCK—An old-fashioned but very popular bedding plant; 5 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.

Allegheny—Very large, semi-double flowers with frilled edges; 10 cents.

LARKSPUR—Suitable for borders and for cut flowers.

Double Dwarf Rocket—5 cents.

Double Tall Rocket—5 cents.

MARIGOLDS—Old 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.

Double Dwarf African Mixed—5 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—Packet, 5 cents; ounce, 10 cents.

Tall Mixed—Packet, 5 cents; ounce, 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 cts.

Disco 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.

Fine Mixed—5 cents.

Special Dwarf Mixture—Made up from six of the finest small-flowered dwarf sorts; nothing better for a brilliant bedding effect; 15 cents.

Flowers

PHLOX—One of the best bedding plants; a great variety of colors.

Large-flowered Mixture—5 cents.

Dwarf—Six to eight inches high; for edging; 5 cents.

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.

SUNFLOWER—Very desirable for fence-rows, hedges or borders.

Miniature Sunflower—Three feet tall; produces an abundance of single flowers; 10 cents.

Double Chrysanthemum-flowered—5 cts.

VERBENA—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.

JERAULD COUNTY, S. D.

I enclose 15 cents for another package of Thornber tomato seed. Notwithstanding the fiercest drouth conditions I ever saw, we had last year tomatoes (Thornbers) for the first time in several years. The plants fruited splendidly, but the fruit could not grow to more than one-quarter to one-third of full size. But, though small, the quality was excellent. No other tomato I have knowledge of would have yielded fruit at all. The Thornber is a wonder among tomatoes. GEORGE O. WILLIAMS, Jerauld County, S. D.

HYDE COUNTY, S. D.

The alfalfa sown on my village lot in 1911 is winning golden compliments from several—two said it must be three years old, to be so big and rank. It was Grimm I bought of you. I believe every seed of the Dakota Acclimatized seed you sent grows.

MRS. E. L. WINANS, Hyde County, S. D.

Flowers

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 Disco 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.

DISCO SPECIAL MIXTURE—
per $\frac{1}{2}$ ounce, 10 cents; ounce, 20 cents; $\frac{1}{4}$ pound, 50 cents; pound, \$1.25; 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, 25 cents; $\frac{1}{4}$ pound, 75 cents; postpaid.

Gladiolus

The improvement that has been made in the gladiolus during the past fifteen or twenty 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.

The gladiolus is one of the easiest flowers to grow that we have in our gardens. No extra care is required to produce the finest display of bloom. 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. Everybody should try at least a few in the flower garden this year. With gladiolus one does not have to secure new bulbs every year. Once started, 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.

DISCO-SPECIAL MIXTURE—This includes one of the best arrays 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, 40 cents per dozen; 40 bulbs for \$1.

Dakota Improved **Seed Company**

Flowers

CHOICE NAMED VARIETIES OF GLADIOLUS

May—One of the best. Pure white, splashed with crimson and showing a light yellow tint in the throat. A tall, strong spike.

Madam Moneret—A delicate pink; tall and free-blooming. Sometimes slightly marked with carmine. A half dozen spikes of this variety make as fine a bouquet as you ever saw.

General Howard—Pure white, with yellow and purple markings in throat.

Atlas—Very early and sure. Often five spikes from one bulb. Color is clear violet with large, velvety maroon blotch.

Lemoine No. 1—Light violet and purple, with deep, velvety purple throat. Long spike; free bloomer.

Vashti—Creamy white, blotched carmine. A large flower and one of the first to bloom. Shaped more like a lily than a gladiolus.

Brenchleyensis—An old variety; one of the most brilliant reds. Whole spikes open at once. Fine for massing.

Any of the above named varieties, 5 cents each; 6 for 25 cents; 25 for \$1. All of one kind or assorted.

The three following are extra choice new varieties:

William Falconer—Clear, rosy pink; very large and very fine. 8 cents each; 4 for 30 cents.

Mrs. Frances King—In many ways the best in the list. A rank, thrifty grower; very large flowers, often five inches across, and a beautifully shaped long spike. Often almost two feet of flowers in bloom at once. Light scarlet with deep markings. 8 cents each; 4 for 30 cents.

America—This is the wonderful variety for which an eastern seedsman paid \$4,000. In color it is soft pink, very light; spikes two to three feet long, with large, spreading blooms. Will bring a higher price in cut-flower market than any other variety. 15 cents each; 4 for 50 cents.

SPECIAL OFFER

Disco-Gladiolus Collection

For 55 Cents

We want every one of our customers to try a few of these gladioli this year, so we are making this special offer. For 55 cents we will send, postpaid, one good sized bulb of each of six named varieties, our selection, and one dozen bulbs of the Disco Special Mixture.

Garden Seed Collections

One of the heaviest items of expense in the handling of garden seed orders is usually the gathering of the different packets and varieties together and packing them for shipment. This must necessarily be done with each individual order where the seeds are selected by the customer. In order to do away with much of this expense, and thus give many more seeds for the same money, we are offering several collections of seeds already put up ready to mail. These include the best varieties we handle and are put up to meet the demands of the one who has only a few square feet in the back yard or the gardener who grows all kinds of vegetables, using from a fraction of an acre to an acre or more. Whatever the size of your garden, you save money by using one of these collections.

By putting up hundreds of these at one time we can do this at very little expense for the packing. By this system you pay for the seeds you are getting and are not obliged to pay for the time usually required by the packer who puts up an individual order.

By a careful study of the three collections we are offering you will undoubtedly find one that will just meet your needs. If it does not exactly do so you can probably save some by ordering one of the smaller collections and adding to it according to your individual needs.

On account of putting up a large number of these collections at one time we cannot make any change in the varieties included in the collections, so please do not request us to do this.

“Disco-50” Collection

This collection is intended for the small gardener who wishes to grow a good variety, but hasn't the room for everything or a large amount of any one thing. This is also a good collection to order if one has a larger garden, but wishes to select a number of special varieties from the catalog to add to the number included in the collection.

Eighteen varieties. Regular catalog value, \$1.05. Collection price, 50 cents.

Beans, Bush Wax Variety.
 Beet, Crimson Globe or Egyptian.
 Cabbage, Eureka or Wakefield.
 Carrot, Oxheart or Chantenay.
 Sweetcorn, Golden Bantam.
 Lettuce, California Cream Butter.
 Lettuce, Prizehead.
 Onion, Red Globe or Wethersfield.
 Parsley, Extra Moss Curled.

Parsnip, Hollow Crown or Guernsey.
 Pepper, Ruby King or Bull Nose.
 Radish, White Icicle.
 Radish, Rosy Gem.
 Tomato, Disco Thornber.
 Nasturtiums, Finest Dwarf.
 Four-o'clock, Mixed Colors.
 Pansy, Disco Mixture.
 Sweet Peas, Disco Mixed.

“Disco-25” Trial Collection

The man who lives in town and gets a spade into his hand when the warm days of spring give him the garden fever, or who follows his wife's instructions and “makes garden,” doesn't wish the whole string of vegetables and flowers listed in the catalog, but wants those that take but little room and can be easily handled in a 2x4 spot in the back yard.

This collection meets this demand exactly. It is also a good trial collection for the gardener who is extremely critical as to the seed he buys and is skeptical of a firm that guarantees its seeds. He wishes to try them before buying in quantity. This collection or the “Disco 50,” if given a fair trial, will convince any gardener that our reason for guaranteeing our seeds is not for the advertising it gives us, but because we have confidence that our seeds will stand the test.

One packet each of ten varieties. Catalog value, 60 cents. Collection price, 25 cents.

Beet, Crimson Globe or Egyptian.
 Carrot, Oxheart or Chantenay.
 Lettuce, California Cream Butter.
 Onion, Red Globe or Wethersfield.
 Parsnip, Hollow Crown or Guernsey.

Radish, Rosy Gem.
 Tomato, Disco Thornber.
 Nasturtiums, Finest Dwarf.
 Sweet Peas, Disco Mixed.
 Four-o'clock, Mixed Colors.

Wheeler's Model Garden Collection

Thirty choice varieties. Regular value, \$2. Collection price, \$1.

Every one 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 choicest varieties—thirty 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 thirty choice varieties of **guaranteed seeds at half price.** Don't overlook Wheeler's Model Garden Collection when making out your order. Complete list of varieties on inside of front cover.

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.

Why We Guarantee Our Seeds

—and Why We Sell By MAIL Instead of Putting Up Seeds In Boxes To Be Sold By Local Stores.

We believe that every one who buys anything is entitled to **know** just what he is getting before he pays out his money. We believe that every dealer should label his goods honestly and accurately. And it is to be regretted that some dealers do not. It is this which made the enactment and enforcement of the pure food law absolutely imperative—for the protection of the people.

Abuses have come to light in the seed business as well as everything else, therefore, for the protection of ourselves as well as our customers, we have adopted the packet which shows the germination test of Disco seeds at the time of packing. We stand ready at all times to refund money paid for any Disco seeds that should not come up to this test, or we will replace them with fresh seeds.

That the quality of seeds distributed by mail-order seedsmen is uniformly higher than that found in box seeds sold by local stores is amply proved by the report of the United States Department of Agriculture, in circular No. 101 of the Bureau of Plant Industry, entitled "The Germination of Packeted Vegetable Seeds," from which we quote below.

"From both the educational and the practical standpoint it is important that the home garden should be planted with seeds which germinate well. The market gardener who uses large quantities of seeds can test them or have them tested for germination before planting and regulate the rate of seeding according to their vitality, but this is not practicable with the small packets used in planting the home garden. Most of the seeds used in planting such gardens are bought in packets either from local stores where box seeds are offered for sale, or they are ordered by mail after consulting the catalog of a favorite seedsman.

"Box seeds are put up in showy packets, lithographed in colors, and packed in boxes containing collections of all the common kinds and varieties of vegetables. These are sold outright to local stores or are sent to them to be sold on commission.

Figure 1

Fig. 1—Curves showing average germination of box vegetable seeds put up by eleven firms in four successive years, and of mail-order seeds bought of twenty firms in one year. The letters at the top represent firms from whom mail-order seeds were purchased, and the figures at the bottom represent firms putting up box seeds.

"It will be seen from the above table that the average germination of the mail-order seeds was 17 per cent higher than that of the box seeds, or more than enough to make the difference between success and failure."

Seeds Tested For Germination

"During the years 1907, 1908, 1909 and 1910 box seeds were purchased and tested for germination, and in 1911 seeds were bought from firms whose principal business is filling mail orders from catalogs.

"In these five years 18,571 packets of vegetable seeds were tested for germination. The box seeds were put up by sixty firms and the mail-order seeds were purchased from twenty firms.

Comparison of Box and Mail Order Seeds, By Firms

"Figure 1 shows the average germination, by firms, of the packets of box seeds put up by each of the eleven dealers whose seeds were purchased in four successive years, together with the average germination, by firms, of the mail-order seeds purchased in 1911. It will be noted that the average germination of the seeds from all but three of the mail-order houses was higher than the highest average for any of the eleven firms putting up box seeds.

Why Mail-Order Seeds Germinate Better Than Box Seeds

“There is doubtless an economic reason for the higher average quality of the seeds sold by mail-order houses as compared with the seeds sent out by many of the houses selling box seeds. It is possible for a new firm or one without reputation to purchase a large quantity of seeds, put them up in showy packets and boxes, and by means of attractive prices dispose of them to local merchants either on commission or by sale outright. Mail-order houses, on the other hand, are dependent for their trade on proportionately few new customers each year, their business being based largely on the satisfactory quality of their seeds which purchasers have used in previous years.

Germination of Seeds Should Be Guaranteed

“The sale of packeted vegetable seeds will not be on a proper basis until each packet is labeled with the percentage of live seed which it contains. This practice would do away with the trade in seeds of low vitality and at the same time give the purchaser the information to which he is entitled, and without which he cannot use to the best advantage the seeds he buys.”

The above recommendation made by the United States Department of Agriculture as to the proper method to handle packeted seeds is just the method that has been followed by the Dakota Improved Seed Company ever since this company has been in business. This is the only company in the United States that makes a practice of thus labeling its packets.

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 artist's imagination, but they do give more information about the seeds 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. If you use a large amount of seeds we would advise your writing to us for special quotations on the quantities desired before placing your order.

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 soils 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.

DAVIS KIDNEY WAX—One of the most hardy and productive wax beans. Pods long, white, straight, crisp and tender. Vines rustless and very vigorous, bearing the pods in clusters. Seed kidney-shaped and white (Fig. A).

PENCIL POD BLACK WAX—Very productive and popular. Pods round and deeply saddle-backed, six to seven inches long, light golden yellow color (Fig. B).

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 (Fig. C).

IMPROVED GERMAN BLACK WAX—One of the most popular and productive of the wax podded varieties. Pods medium length, curved, cylindrical, fleshy and of a clear yellowish white. Remain for some time in condition for use (Fig. D).

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 (Fig. E).

BURPEE'S 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 (Fig. F).

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.

Prices—Any variety listed above—ounce packet, 5 cents; $\frac{1}{2}$ pint, 10 cents; pint, 25 cents; quart, 45 cents; postpaid. By express or freight—quart, 30 cents; peck, \$1.75. For prices on larger quantities, write for special quotations.

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 (Fig. G). $\frac{1}{2}$ pint, 15 cents; pint, 30 cents; quart, 55 cents; postpaid. By express or freight—quart, 40 cents; peck, \$2.

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 (Fig. H). $\frac{1}{2}$ pint, 15 cents; pint, 30 cents; quart, 55 cents; postpaid. By express or freight—quart, 40 cents; peck, \$2.

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 (Fig. I). $\frac{1}{2}$ pint, 15 cents; pint, 30 cents; quart, 55 cents; postpaid. By express or freight—quart, 40 cents; peck, \$2.

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—quart, 30 cents; peck, \$1.25; bushel, \$4.50.

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 four to six inches deep in rows eighteen inches to three feet apart, and twelve 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.

COLUMBIAN MAMMOTH WHITE—A distinct and valuable variety. Produces an abundance of clear white shoots which remain white as long as fit for use. Packet, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 25 cents; pound, 75 cents; postpaid.

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. Packet, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 20 cents; pound, 55 cents; postpaid.

Broccoli

Similar to cauliflower, but is supposed to be somewhat hardier.

Culture—Same as cauliflower.

PURPLE CAPE—The standard variety, forming close, compact heads of a brownish purple color. Packet, 5 cents; ounce, 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. Packet, 5 cents; ounce, 20 cents; postpaid.

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.

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 sixteen inches to two feet apart for the garden varieties, and

eighteen inches to two and one-half 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 four 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 five to eight 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 very popular early beet. Very productive and of excellent quality. Roots large, round, smooth and blood red. A good variety for either home use or market.

EDMAND'S BLOOD TURNIP—A valuable sort much grown by market gardeners because of its regular shape, early maturity, fine flavor and good qualities.

SWISS CHARD OR SPINACH BEET—This does not make edible roots, like the regular garden beets, but is grown for the broad, white leaf-stalks, which are bunched and cooked in the same manner as asparagus, and make a delicious summer vegetable. The young leaves may be gathered also and cooked like spinach.

Any variety listed above, postpaid— $\frac{1}{2}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 25 cents; pound, 90 cents. See "Field Root Crops," page 35, for mangels and sugar beets.

ROBERTS COUNTY, S. D.

Kindly send me your seed catalog for year 1912. I have had some seeds and grain from your firm and found them O. K. I purchased the seed while I lived at Castlewood, S. D.

E. J. CLARK, Roberts County, S. D.

MINNEHAHA COUNTY, S. D.

I would be pleased to you if you would send your catalog, as I have not received it yet. Your catalog or seed book is valuable to farmers and gardeners. The seeds I got from you last spring were fine. I won prizes on vegetables grown from your seeds.

PEDER PHILLIP, JR., Minnehaha County, S. D.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

BE SURE TO READ OUR MONEY-BACK GUARANTEE ON PAGE 3.

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 cutworms 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 hardened. 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.

DISCO-EUREKA—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 South Dakota 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. Packet of 300 seeds, 5 cents; ounce, 25 cents; $\frac{1}{4}$ pound, 75 cents; pound, \$1.95; 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 two or three times as large as this well known early cabbage. This entirely new introduction, on account of its great merit, will undoubtedly very soon become as prominent among early varieties as its winter companion, the Danish Ball Head, is among the later sorts. We recommend this cabbage to every gardener for trial. Packet, 15 cents; ounce, 55 cents; $\frac{1}{4}$ pound, \$1.60; pound, \$5.50; postpaid.

Copenhagen Market and Premium Flat Dutch

COPENHAGEN MARKET—A new cabbage of great merit. Heads large, round and solid. As early as the cone-shaped varieties and as large as most later sorts.

EARLY WINNIGSTADT—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."

Danish Ball Head Cabbage

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. Packet of 300 seeds, 5 cents; ounce, 25 cents; $\frac{1}{4}$ pound, 75 cents; pound, \$1.95; postpaid.

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.

SUCCESION—An excellent second-early sort, producing solid heads of good size.

DANISH STONEHEAD—The best, largest and surest heading red cabbage. Used mostly for pickling.

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. Packet, 5 cents; ounce, 25 cents; $\frac{1}{4}$ pound, 75 cents; pound, \$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 twelve to fifteen pounds.

* Any variety except where noted—packet of about 300 seeds, 5 cents; ounce, 20 cents; $\frac{1}{4}$ pound, 60 cents; pound, \$1.75; postpaid.

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 three to four feet apart, but for the garden they are often grown in beds with the plants six to eight 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. Packet, 10 cents; ounce, 40 cents; $\frac{1}{4}$ pound, \$1.25; pound, \$4.50; postpaid.

WHITE PLUME—This is the earliest and one of the most easily blanched varieties grown. Extensively grown for market. Packet, 5 cents; ounce, 20 cents; $\frac{1}{4}$ pound, 50 cents; pound, \$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. Packet of about 500 seeds, 10 cents; ounce, 40 cents; $\frac{1}{4}$ pound, 85 cents; pound, \$2.75; postpaid.

Golden Self-Blanching Celery

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Carrot

Culture—Sow seed as soon as the ground is warm enough in drills one to two feet apart in the garden and two or three 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.

DANVERS 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— $\frac{1}{2}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 30 cents; pound, 90 cents; postpaid. See "Field Root Crops," page 35, for stock carrots.

Danvers Half Long Carrots

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. Packet, 10 cents; $\frac{1}{2}$ ounce, 75 cents; ounce, \$1.25.

DISCO-SNOWBALL—In earliness, reliability in heading, general appearance and size of head this is unequaled. A very popular variety wherever cauliflower is grown. Our special stock of seed comes from one of the most reliable Danish growers. We can recommend it for the most critical gardeners. Packet, 15 cents; $\frac{1}{4}$ ounce, 60 cents; $\frac{1}{2}$ ounce, \$1; ounce, \$1.75.

Disco-Snowball Cauliflower

Sweet Corn

For a succession of crops we recommend the following varieties, which are named in the order of maturity: Malakoff, Disco-Gold Medal, Early Evergreen and Disco-Evergreen. In the northern part of our territory the Malakoff and Disco-Gold Medal are all that are needed to produce corn of the finest quality throughout the corn season.

Culture—In general the culture of sweetcorn 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 two and one-half to three feet apart, with the plants six to eight inches apart in the rows. Later and larger varieties should be planted further apart, depending upon the size of the plant.

Special Offer: 25 Cents

One-third pint of each of the four following varieties of sweetcorn sent postpaid for 25 cents:

Peep-o-Day

Black Mexican

Disco Gold Medal

Disco Evergreen

Catalog value, 50 cents

If planted early in May, these four varieties should provide the table with sweetcorn from July to October.

Disco-Gold Medal

For several years the yellow grained varieties of sweetcorn were unpopular because of the prejudice in the minds of some people educated up to the white-kernelled sorts. The yellow sorts have, however, steadily won favor strictly on their quality merit. Once tasted they are never forgotten. The Golden Bantam, which was introduced several years ago, has attained a reputation second to no other early variety.

In the Disco Gold Medal we have a variety similar to the Golden Bantam, but better. This may seem impossible to those familiar with that older variety, but it is a fact. The Disco Gold Medal is fully as early and is sweeter and more productive. The ears are longer and are produced from two to five on a stalk.

The Disco Gold Medal has been undergoing improvement by selection for the last five years in the hands of Mr. A. L. Goddard of Fort Atkinson, Ia. Mr. Goddard is known by all corn growers as the originator of two of the best known varieties of field corn grown today—the Pride of the North and Silver King.

We have secured all of the stock of this variety from Mr. Goddard and now offer it for the first time. We especially request every lover of Golden Bantam corn to give the Disco Gold Medal a trial. You will not be disappointed. Ounce packet, 10 cents; $\frac{1}{2}$ pint, 20 cents; pint, 40 cents; quart, 75 cents; postpaid. By express or freight—quart, 60 cents; peck, \$2.50.

Gold Medal Sweetcorn

GOLDEN BANTAM SWEETCORN—An early variety; only a few days or a week later than Malakoff. The stalks are three and one-half to four 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. Every one remarks when tasting Golden Bantam for the first time: "This is the best sweetcorn I have ever eaten. It is delicious." Ounce packet, 5 cents; $\frac{1}{2}$ pint, 10 cents; pint, 25 cents; quart, 40 cents; postpaid. By express or freight—quart, 25 cents; peck, \$1.10.

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. Ounce packet, 5 cents; $\frac{1}{2}$ pint, 10 cents; pint, 20 cents; quart, 35 cents; postpaid. By express or freight—quart, 20 cents; peck, \$1.

MALAKOFF SWEETCORN—The earliest sweetcorn 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 two to four 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 sweetcorn was shown as the "earliest sweetcorn." Ounce packet, 10 cents; $\frac{1}{2}$ pint, 10 cents; pint, 25 cents; quart, 45 cents; postpaid. By express or freight—quart, 30 cents; peck, \$1.75.

PEEP-O-DAY SWEETCORN—Similar to the Malakoff in both character of growth and season. This variety of sweetcorn has been very extensively grown throughout the Northwest for several years and has become very popular. We can highly recommend it to critical growers. Ounce packet, 5 cents; $\frac{1}{2}$ pint, 10 cents; pint, 25 cents; quart, 40 cents; postpaid. By express or freight—quart, 25 cents; peck, \$1.10.

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. Prices same as Red Cory.

BLACK MEXICAN—Early; very sweet and good. Prices same as Red Cory.

Disco - Evergreen

For years the Evergreen sweetcorn has been the standard late variety for both home use and market. We have in the Disco Evergreen a specially valuable selection from the Stowell's Evergreen. It is more desirable in every way; more uniform as to type of ear and ripening; also sweeter and more productive. Having been grown in the Northwest for several years, it is particularly adapted to northwestern conditions. You cannot be disappointed in the type and quality of the Disco Evergreen. Ounce packet, 5 cents; $\frac{1}{2}$ pint, 10 cents; pint, 25 cents; quart, 45 cents; postpaid. By express or freight—quart, 30 cents; peck, \$1.50.

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. Prices same as Red Cory.

Disco-Evergreen Sweetcorn

STOWELL'S EVERGREEN—The standard general crop or late sweetcorn. 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. $\frac{1}{2}$ pint, 10 cents; pint, 20 cents; quart, 35 cents; postpaid. By express or freight—quart, 20 cents; peck, \$1; bushel, \$3.50.

COUNTRY GENTLEMAN—One of the sweetest late varieties in cultivation. Ears of large size; kernels long, pointed and arranged irregularly on the cob. $\frac{1}{2}$ pint, 10 cents; pint, 25 cents; quart, 40 cents; postpaid. By express or freight—quart, 25 cents; peck, \$1.25.

Pop Corn

There is no good reason why every farmer should not have a good supply of popcorn 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. 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— $\frac{1}{2}$ pint, 10 cents; pint, 25 cents; by mail, postpaid. By express or freight—quart, 25 cents; peck, \$1.25.

Egg Plant

Culture—Sow in a hotbed 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. Packet, 5 cents; ounce, 50 cents; 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. Packet, 5 cents; ounce, 15 cents; 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. Packet, 5 cents, postpaid.

Kohl-Rabi

Culture—Sow in the open in early May in rows eighteen inches apart; later thin the plants to three inches. When the thickened roots are two 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. Packet, 5 cents; ounce, 25 cents; postpaid.

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.

LARGE AMERICAN FLAG—The best and most popular variety. A quick, strong grower. Packet, 5 cents.

Cucumber

Culture—Sow in the open ground when danger of frost is past. Plant from six to twenty seeds in a hill and have the hills from four to six 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 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.

Several Varieties of Cucumbers

Their dark green color until well advanced toward 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 in length, slim, but uniform in size; dark green in color. Flesh is solid, crisp and of 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— $\frac{1}{3}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 25 cents; pound, 85 cents; postpaid. By express or freight—pound, 75 cents.

GRAND FORKS COUNTY, N. D.

Enclosed please find 25 cents in stamps, for which please send to my address one packet Thornber tomato seed, 15 cents, and one packet of Yakima tomato seed, 10 cents. I wish to say a few words about your seeds, they are certainly fine. I never could get many ripe tomatoes until I got seed from you. Last year my tomatoes were the talk of the neighborhood. Am certainly very grateful to you. I intend sending for a large order of seeds at a later date. Please send the tomato seed soon.

MRS. VAL WEST, Grand Forks County, N. D.

Hanson

Grand Rapids

California Cream Butter

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 six to twelve inches apart. For early use pick leaves directly from the plants. Later thin the plants in the row or transplant from six to eight 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. Every one 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 this variety has not been 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 200 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— $\frac{1}{8}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 30 cents; pound, 90 cents; postpaid.

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.

Muskmelon

Disco Gem Muskmelon

Disco - Gem

A special strain of the well known Rocky Ford or Netted Gem melon. It has been developed by hybridization between two distinct strains and by continued selection for several years. It combines the two characteristics of early maturity and disease resistance which were present in the parent varieties. This strain has a remarkable vigor of growth until it has set and developed a large set of fruit, and then the growth seems to stop; that is, the new shoots, the vines seeming to throw all the force into the development of the fruit. This trait seems to make it desirable in one point, as it has not been so seriously attacked by the melon aphid as the strains that have plenty of young, succulent shoots. This strain has been tested in many parts of the country, where it has been pronounced the best cantaloupe that ever grew. The quality is extra sweet and good. The flesh is green. The form and size are not quite as uniform as in some of the older bred strains. $\frac{1}{2}$ ounce, 10 cents; ounce, 20 cents; $\frac{1}{4}$ pound, 65 cents; pound, \$2; postpaid.

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.

BURRELL'S GEM—Another fine melon from Rocky Ford, Colo., 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 two pounds each.

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.

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— $\frac{1}{2}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 30 cents; pound, \$1; postpaid.

Watermelon

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.

RED SEEDED RUSSIAN—A medium size early melon of excellent quality. Raised almost exclusively by the Russian colonists in South Dakota and sold by them in the local markets. A very popular variety among those who are acquainted with its desirable qualities.

WHO SAID WATERMELON?

**Watermelon Patch of Mrs. Ross G. Moore,
Tripp County, S. D.**

KLECKLEY'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 are grown near Mitchell every 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.

CITRON—Fruit round and smooth. Is not eaten raw. Used for preserves only.

Any variety— $\frac{1}{2}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 20 cents; pound, 60 cents; postpaid.

Dakota Improved **Seed Company**

"Life on the Claims" and Gardens That Are Gardens

Okra or Gumbo

Culture—Sow in June in drills two and one-half feet apart. When the plants are up thin to ten 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. Packet, 5 cents; ounce, 10 cents; 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. Packet, 5 cents; ounce, 10 cents; postpaid.

DAWSON COUNTY, MONTANA

I got your \$1 collection last year and must say it was fine. Those Thornber tomatoes and Yakima tomatoes do fine here in Montana. They were ripe and fine when my neighbors' tomatoes were just beginning to bloom, and I was selling ripe tomatoes at 10 cents per pound, and I think that was good enough. I have a friend that thinks there is no garden seed as good as the _____ Company. She planted the _____ garden seed and raised green tomatoes and I got my garden seed from you and had fine, ripe tomatoes.

S. E. BELDER, Dawson County, Mont.

MEADE COUNTY, S. D.

Please send me your catalog for 1912. The seeds I had from you in 1910 did well and I am anxious to try your tomato seeds.

MRS. E. CHANEY, Meade County, S. D.

STANLEY COUNTY, S. D.

I have used your seeds for the last three years and have found them perfectly satisfactory in every respect, and intend to use your seeds again this year. So will need a catalog.

I have two or three neighbors to whom I have recommended your house, and if you will send me three or four copies I will distribute them, feeling that I am doing both you and my neighbors a good turn.

E. B. ROUSE, Stanley County, S. D.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

BE SURE TO READ OUR MONEY-BACK GUARANTEE ON PAGE 3.

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 three or four 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 one foot to eighteen 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.

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 Wethersfield, 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.

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. Packet, 5 cents; ounce, 35 cents; $\frac{1}{4}$ pound, 80 cents; pound, \$2.50; postpaid.

Any variety except the Southport White Globe—packet, 5 cents; ounce, 25 cents; $\frac{1}{4}$ pound, 60 cents; pound, \$1.85; postpaid.

Southport White Globe Onion

Dakota Improved

Seed Company

Large Red Globe Onions

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 red 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.

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.

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.

Any variety except the Southport White Globe—packet, 5 cents; ounce, 25 cents; $\frac{1}{4}$ pound, 60 cents; pound, \$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 cents; white sets, per quart, 35 cents; postpaid. Write for prices on larger quantities.

TOP SETS—Per quart, 30 cents, postpaid.

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.

Culture—Sow the seed as early in the spring as the ground can be worked, in drills twelve to eighteen 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— $\frac{1}{2}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 20 cents; pound, 60 cents; postpaid.

Peas

Nott's Excelsior Peas

No garden vegetable is more popular than green peas. The dwarf varieties may be grown in almost any garden, however small. No garden is complete without a few rows of early and general crop peas.

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 1st or middle of June. In this way one can have peas through the summer months. Sow in single or double rows eighteen inches to three feet apart. For very early planting place the seeds about one inch deep and have the later plantings from two to four inches deep. Place the seed two to three 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 two and one-half feet high, and bear profusely of medium sized pods, each containing five to seven peas. $\frac{1}{2}$ pint, 15 cents; pint, 35 cents; quart, 65 cents; postpaid. By express or freight—quart, 50 cents; 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. Height, two to two and one-half feet. Prices same as for First and Best.

AMERICAN WONDER—An early, wrinkled pea of finest quality. The vines are extremely dwarf in growth, varying from ten inches to two feet in height, depending upon the soil in which they are grown. It is one of the earliest dwarf wrinkled peas and follows closely upon the Earliest of All.

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. Height one and one-half to two feet.

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. Height, one to one and one-half feet.

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. Height, one to one and one-half feet.

GRADUS—This is one of the finest large podded, extra early peas. Pods are about four inches long, well filled with large, wrinkled, deep green peas of finest quality. Peas remain in edible condition for some time after large enough to use. Height, three feet.

ADVANCER—A wrinkled pea that is very popular with market gardeners because of its great productiveness. Grows two to three feet high.

DWARF GRAY SUGAR—An edible podded variety. Sugar peas are not intended to be shelled, but pods are cooked same as string beans.

Any variety, except where noted— $\frac{1}{4}$ pint, 15 cents; pint, 30 cents; quart, 50 cents; postpaid. By express or freight—quart, 35 cents; peck, \$2.25.

Pepper

Culture—Sow in hotbed in March and transplant to open field in June. Set the plants about eighteen 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—Packet, 5 cents; ounce, 30 cents; 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 eight or more feet apart. Field varieties are commonly grown in cornfields by sowing seeds in every third or fourth hill.

CONNECTICUT FIELD

—This is the earliest field pumpkin. Immensely productive and commonly grown in cornfields for stock feeding. Also good for pies. Ounce, 5 cents; $\frac{1}{4}$ pound, 15 cents; pound, 50 cents; postpaid. By express or freight—pound, 40 cents; 10 pounds or over at 30 cents per pound.

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. $\frac{1}{4}$ ounce, 5 cents; ounce, 20 cents; $\frac{1}{4}$ pound, 50 cents; pound, \$1.25; postpaid.

Small Sugar Pumpkin

Connecticut Field Pumpkin

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. $\frac{1}{2}$ ounce, 5 cents; ounce, 15 cents; $\frac{1}{4}$ pound, 35 cents; pound, 85 cents; postpaid.

SMALL SUGAR—The standard pie pumpkin, resembling the field variety in color and shape, but of very much smaller size, averaging from eight to twelve inches in diameter. Is as fine grained as average squash and of excellent flavor. $\frac{1}{4}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 25 cents; pound, 75 cents; postpaid.

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 eight to ten 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 twenty-five 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— $\frac{1}{3}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 25 cents; pound, 65 cents; postpaid.

White Icicle Radish

Rhubarb or Pie Plant

Culture—Sow the seed in rows a foot apart in May. When the plants are well up thin to six inches in the row. Cultivate thoroughly. The following spring transplant to rows five feet apart, with plants three feet apart in the row.

MAMMOTH—This variety is vigorous and productive. Stalks twelve to fifteen inches long, one inch or more thick. An excellent sort for pies or sauce. Packet, 5 cents; ounce, 10 cents; postpaid.

Salsify or Vegetable Oyster

Culture—Sow as early as the ground can be worked, in drills twelve inches to two feet apart. Later thin to five 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. Packet, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 30 cents; pound, 90 cents; postpaid.

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. Packet, 5 cents; $\frac{1}{4}$ pound, 15 cents; pound, 45 cents; postpaid.

Squash

Disco-Hubbard

Disco-Hubbard

Our special strain of this well known variety is the best that can be obtained anywhere. The seed is produced by one of our best growers. By careful selection he is able to maintain a much higher standard of purity and productiveness than can be obtained from ordinary stock. $\frac{1}{8}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 35 cents; pound, \$1; postpaid. Regular Hubbard stock, same prices as other varieties.

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 CHILI—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 Chili 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. $\frac{1}{8}$ ounce, 10 cents; ounce, 20 cents; $\frac{1}{4}$ pound, 50 cents; pound, \$1.25; postpaid.

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.

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— $\frac{1}{8}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 30 cents; pound, 75 cents; postpaid.

Mammoth White Bush 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, S. D. This stock is extra fine. $\frac{1}{4}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 35 cents; pound, \$1; postpaid.

Delicious Squash

Turnip

Both the English and the Swede turnip or rutabaga are desirable garden crops, and the latter is 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. $\frac{1}{2}$ ounce, 10 cents; ounce, 15 cents; $\frac{1}{4}$ pound, 30 cents; pound, 80 cents; 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— $\frac{1}{2}$ ounce, 5 cents; ounce, 10 cents; $\frac{1}{4}$ pound, 20 cents; pound, 60 cents; postpaid.

For field varieties, see "Field Root Crops," page 35.

POWELL COUNTY, MONT.

Your tomatoes are the best for this locality. The Yakima was the earliest of the so-called earliest of other seedsmen. I will try and take orders for your seed next winter. Please send me literature next fall. JOSEPH PERKINS, JR., Powell County, Mont.

MEADE COUNTY, S. D.

I bought some Golden Hubbard squash seed from you this spring and raised some very fine squash. They are the finest flavored squash I have ever eaten. J. D. GROFF, Meade County, S. D.

USE ORDER BLANKS ON PAGES 5 TO 8 WHEN ORDERING.

BE SURE TO READ OUR MONEY-BACK GUARANTEE ON PAGE 3.

Tomato

Culture—Sow seed during March and April in boxes in house or hotbed. As soon as the plants begin to crowd themselves, plant in boxes or frames four to six inches apart each way. After danger of late frosts is past plant in the open ground three to four feet apart. In this latitude plants should not be put into the ground until about June 1. 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.

DAKOTA FARMER—A medium early globe-shaped variety introduced in 1909. In some parts of the Northwest it has given good returns. One of the best shippers.

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 to 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, Dakota Farmer and Ponderosa—packet, 5 cents; $\frac{1}{2}$ ounce, 25 cents; ounce, 40 cents; $\frac{1}{4}$ pound, \$1. Any other of the above varieties—packet, 5 cents; $\frac{1}{2}$ ounce, 20 cents; ounce, 30 cents; $\frac{1}{4}$ pound, 75 cents; postpaid.

Yakima Tomato—The Earliest of All

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 five years and has proved to be the earliest variety that he has grown, and he has tested nearly all of the standard varieties. 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 any one 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. Packet, 10 cents; $\frac{1}{2}$ ounce, 60 cents; ounce, \$1.

Field's Early June

The introducer of this tomato says: "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 has been said about this tomato. The tomatoes grow very large and smooth and begin ripening August 1. Price, per packet, 10 cents; $\frac{1}{2}$ ounce, 60 cents; ounce, \$1.

Disco - Thornber Tomato

**700 Bushels of Ripe Fruit from One-Half Acre at Brookings, S. D.
Ripe Fruit the Middle of July in Central South Dakota**

No one variety of vegetable introduced by us has given more general satisfaction than the Thornber tomato. It has been grown by Mr. A. E. Thornber of Brookings County, S. D., for twelve 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 three-quarters to one and one-half pounds each and there are very few seeds. The first picking of this tomato in 1909 was made July 28 and in 1910 and 1912 July 12. At this time it sold in the Brookings market for \$6 per bushel. Later, and throughout the season, it brought 25 per cent 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. The fruit of this variety contains very few seeds. When the crop was being harvested for seed this year many fruits contained no more than seven or eight seeds each. Packet of 300 seeds, 15 cents; ½ ounce, 75 cents; ounce, \$1.25.

**PROF. BLINN OF THE COLORADO AGRICULTURAL COLLEGE HAS THE FOLLOWING
TO SAY ABOUT THE THORNBUR TOMATO:**

"I am very much pleased with the Thornber tomato we got from you. It is by far the most prolific and earliest tomato that has ever been grown, to my knowledge."
PHILO K. BLINN.

"THORNBUR TOMATOES IMMENSE"

"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.

"FINE FLAVOR AND A GOOD YIELDER"

"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.

"FIFTY-TWO TOMATOES ON ONE STALK"

"The Thornber tomato is first class. I raised one stalk from this seed this year which had fifty-two fine tomatoes on it."

S. R. GRABILL, Wagner, S. D.

"BEST YIELDER EVER TRIED"

"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.

The Thornber Tomato

Live Plants

During the spring season we can furnish vegetable and bedding plants right from the greenhouses and cold frames. These will 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 two-inch pots.....	.35	2.50	.....

Bedding Plants—Flowers for the Garden

Bedding plants will be ready April 10 to June 30.

Alyssum, Sweet, per dozen	35c to 50c
Asters, per dozen.....	35c to 50c
Ageratum, per dozen.....	50c to 75c
Coleus, per dozen.....	50c to 75c
Daisies, Bellis, per dozen.....	35c to 50c
Daisies, per dozen.....	50c
Geraniums, per dozen.....	75c, \$1.00, \$1.50
Heliotrope, per dozen.....	50c, 75c, \$1.00
Lobelia, per dozen.....	50c
Salvias, per dozen.....	50c, 75c, \$1.00
Pansies, per dozen.....	40c, 50c
Verbenas, per dozen.....	50c

The Columbia Planter

The Columbia Planter is a machine that will sow accurately any kind of seed both small and large, and in about any quantity a person would desire. It is a positive force feed machine, every seed is carried to the ground and covered and not a seed can escape or can a seed pass through the machine and escape to the ground unless the machine is in gear and ready to do its work. It is mathematically correct and not a seed can be shaken out when you stop moving whether it is in gear or out of gear. There is a little book published that goes with this machine telling about this machine and the seeds that can be sown. This will be furnished to anybody upon inquiry. Cylinders can be made to suit any kind of seed, and will sow any quantity, and all the cylinders are interchangeable. Seven cylinders are sent with each machine at the regular machine price. One great advantage of this machine over all other makes is that it will sow a single package of most seeds as well as a pound-lot. This point appeals particularly to the small gardener. The best model for the general gardener is the No. 3 machine which we offer F.O.B. Mitchell, S. D. at \$11.75 or F.O.B. Springfield, Ohio at \$10.75.

The "Perfection" Sprayer

The Strongest and Most Powerful Sprayer Made

Perfectly Simple—Simply Perfect

Highest Type of Direct Air
Pressure Sprayer Made

This is a sprayer of the high pressure type. It is larger, stronger and much more powerful than anything else in its class, and is as near fool-proof as it can be made. The barrel is seven and one-half inches in diameter, twenty inches high. The pump is one and three-fourths inch seamless brass tubing. The top is fastened after the style of the best makes of fire extinguishers. The hose is five-ply cloth inserted. The nozzle is our well known automatic type. Capacity of sprayer, four gallons; weight, nine and one-half pounds. All sprayers tested to sixty pounds before leaving factory. Built of galvanized steel or all brass, as ordered.

This sprayer will handle whitewash, water, paints, Bordeaux mixtures, etc., perfectly. For whitewash and all heavy mixtures, use the extra nozzle cap which comes with the sprayer. By using a nozzle extension trees can be sprayed and high rooms whitewashed. These extensions come in two eighteen inch pieces; one or both may be used.

Perfection Sprayer, galvanized, with single nozzle. \$5.00
Perfection Sprayer, galvanized, with double nozzle. 6.50
Perfection Sprayer, brass, with single nozzle.... 6.75
Perfection Sprayer, brass, with double nozzle.... 8.25
Extras—Tree nozzle, \$1.50; No. 4 Bordeaux nozzle, 75c.

The "Easy" Compressed Air Sprayer

The only one of its kind on market. Strong, durable and attractive. Has a large and strong pump, automatic shut-off nozzle, legs under tanks. Can be used for white-washing, disinfecting and cleaning chicken-houses, and is very desirable for garden use, etc. It is built of galvanized steel or brass, as ordered. Holds one gallon.

"Easy" Sprayer, galvanized..... \$2.25 each
"Easy" Sprayer, brass..... 3.25 each

The "Misty" Single Action

The "Rapid" Double Tube

50 cents each

Has two tubes for delivering liquid. Makes wide, fan-shaped spray. Fine for fly chasers. Made in galvanized steel. Holds one quart.

40 cents each

A low-cost sprayer, made of heavy tin; a general purpose machine. Holds one quart.

Dakota Improved

Seed Company

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 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.

Hall's Dandelion Puller

The best implement for pulling dandelions or other similar weeds from a lawn. Easily operated. Succeeds where everything else fails. It doesn't cut them off, but pulls them up by the roots. Nothing to get out of order. By express or freight, 50 cents each.

"Norcross" Garden Cultivator, Hoes and Weeders

5-PRONG—3-PRONG—MIDGET
3 Lbs.—2 Lbs.—12 Ozs.

PRICES
75c—50c—25c

The most useful of all garden implements. If the soil is constantly stirred weeds cannot sprout, and the valuable soil moisture which feeds and gives life to growing plants will be retained.

Close hand cultivation is best, and Norcross Cultivator Hoes and Weeders are like a human hand, the fingers of which work closely around the delicate plants without injuring them, stirring the soil to any depth and leaving it level and loose, without a footprint upon it.

Five-prong Hoe, four-foot handle; weight, 3 pounds. Price..... 75c
Three-prong Hoe, four-foot handle; weight, 2 pounds. Price..... 50c
Three-prong Midget Weeder, nine-inch handle; weight, 12 oz. Price. 25c

By express or freight, charges paid by receiver.

Mehler's Handy Gardener Hoe, Rake, Weeder and Cultivator in One

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.

By express or freight, 85 cents each.

Planet Jr. Garden Tools

The new "Planet Jr." catalog is the handsomest, best and most instructive book ever issued on a similar subject. Full of little points that bring profit. Full of true and handsome illustrations. We mail it free to any address on application.

No. 4 "Planet Jr." Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow

Weight, 53 pounds. Price, complete.. \$10.50
As a seeder only; holds 2½ quarts of seed..... 8.50

This tool combines in a single convenient implement a capital hill-dropping seeder, a continuous row seeder, an admirable single wheel hoe, an excellent furrower, a capital wheel cultivator and a rapid and efficient wheel garden plow.

No. 25 "Planet Jr." Combined Hill and Drill Seeder and Double Wheel Hoe, Cultivator and Plow

Steel Frame

Weight, packed, 59 pounds; holds 2½ quarts of seed. Price.... \$13.00

This new combined machine is intended for gardeners who have a large enough acreage in crops for a double wheel hoe to be used to good advantage, and yet prefer not to buy seeders and wheel hoes separately.

No. 17½ "Planet Jr." Single Wheel Hoe

Steel Frame

Weight, 21 pounds. Price..... \$4.00

You can do more and better hoeing with it in one day than you can do in three days with a hand hoe. The pair of six inch hoes, three cultivator teeth and leaf lifter which go with it, are all the finest of their kind. Other tools can be added as needed.

No. 12 Double Wheel Hoe, Cultivator and Plow

Steel Frame

Weight, 34 pounds. Price..... \$7.00

The Planet Jr. double wheel hoes are the greatest cultivating tools in the world for the onion and small sugar beet grower, and also for every grower of garden crops from drilled seed. This tool has one pair plows, one pair hoes, two pairs cultivator teeth and a pair of leaf lifters. The tools sold with No. 12 are what gardeners use most, and the others can be added as wanted.

All prices quoted on this page are F. O. B. Mitchell, S. D., or Minneapolis, Minn.

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

Dr. A. A. Brigham

No recommendation is needed for these poultry foods further than to say that they are made according to formulas of Dr. A. A. Brigham, who has done more to encourage and educate the American public in poultry raising than any other living man.

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. Dr. Brigham is at present principal of the South Dakota School of Agriculture and director of the summer school. Previously he held many important positions as instructor in agriculture and poultry raising.

After much effort we secured the co-operation of Dr. 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 assure you safety and satisfaction in buying seeds from this company.

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 livestock 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 gathering in the eggs by the dozens in return.

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 especially prepared for dry hopper feeding of young chicks from three days to about twelve 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 chicks. 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.

B-B Chick Ration is put up in bags containing 50 and 100 pounds. Price f. o. b. Mitchell, S. D., 50 pound bag, \$1.25; 100 pound bag, \$2.25. Special prices will be made on orders of five 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 is put up in bags containing 50 and 100 pounds. Price f. o. b. Mitchell, S. D., 50 pound bags, \$1.15; 100 pound bags, \$2. Special prices will be made on orders of five or more bags or assorted orders.

Progressive Poultry Culture. By Dr. A. A. Brigham. The latest, most comprehensive and practical book on the market today. The whole poultry proposition between two covers. Price, \$1.50, postpaid.

Short-Cut Alfalfa

There are numerous uses of **short-cut alfalfa** in poultry feeding. Steamed, it makes excellent green food for fowls of all ages and descriptions. 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 two sizes: 50 pound bag, 95c; 100 pound bag, \$1.75; f. o. b. Mitchell, S. D.

Granulated Beef Scrap

Properly prepared **beef scrap** furnishes the most concentrated form of protein for poultry feeding. It will go further 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. 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 two sizes: 50 pound bag, \$1.75; 100 pound bag, \$3.35; f. o. b. Mitchell. Prices subject to change.

Poultry Bone

Poultry bone 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 **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.

Poultry bone can be furnished in three sizes: **fine** for small chicks; **medium** for older chicks; and **large** for fully developed fowls. All sizes are the same price: 50 pound bag, \$1.50; 100 pound bag, \$2.85; f. o. b. Mitchell, S. D.

Mica Spar Grit for Poultry

There are several sources of grit for poultry. The essential quality of a first class grit is that it should be hard and have sharp corners. **Mica Spar Grit** is one of the best kinds. Round pebbles and soft limestone are valueless for this purpose. We can furnish **Mica Spar Grit** in two sizes: large for adult fowls and small for chicks. 100 pound bag, either size, 95 cents.

Crushed Oyster Shell

In addition to grit, laying hens require lime for the manufacture of eggshells. This is best furnished in the form of **crushed oyster shells**. 100 pound bag, 95 cents.

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 axe 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 ounce tin, 25 cents; 4 ounce tin, 50 cents. By express or freight, charges paid by receiver: pound, \$1.

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 three or four hours, when it should be opened and thoroughly aired before fowls are allowed to again occupy it. Price, 10 cents each; by mail, postpaid, 15 cents.

Lice Killer Nest Eggs

A boon to the poultry raiser as well as to the 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 setting hens. Price, 5 cents each; box containing one dozen, 50 cents; by mail, postpaid, 10 cents 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.

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 can not 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: 15 cents each; two for 25 cents; postage, 7 cents each, extra. Weight, 3¼ pounds per dozen. We do not include cans or jars with the "All-Rite."

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 three sizes: the 1-quart size for chicks; 2-quart for developing fowls; and 3-quart for adults. Prices, by freight or express—1-quart size, each, 20 cents; half dozen, \$1; dozen, \$1.85; 2-quart size, each, 25 cents; half dozen, \$1.35; dozen, \$2.50; 3-quart size, each, 30 cents; 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 three compartments, one for each of the three 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 cents; half dozen, \$2.75; dozen, \$4.90.

Dry-Food Hopper

The feeding of dry food in hoppers is practiced by the best poultrymen today. This hopper is specially adapted to feeding our B-B Laying Ration. Keep it full before the hens all the time and keep a record of results. The hopper is similar in shape to the grit and shell box, but is larger, holding about ten quarts. It has two compartments, one small and one large. By freight or express: each, 75 cents; half dozen, \$4.

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 cents; 25 for 25 cents; 50 for 40 cents; 100 for 65 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 cents.

Disco

DISINFECTANT

A Disinfectant that Disinfects

Absolutely NOT POISONOUS, Disinfects, Cleanses, Purifies, Sterilizes, Heals, Kills Lice and Mites on all Domestic Animals

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 today 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 livestock 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 1½ 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 four sizes: 1-quart can, making 25 gallons disinfectant, 50c; ½-gallon can, making 50 gallons disinfectant, 90 cents; 1 gallon can, making 100 gallons disinfectant, \$1.50; 5-gallon can, making 500 gallons 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 any one 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. Any one 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. For 15 cents we will include one full package for trial with any express or freight order for other items.

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 housecleaning, when the coops are being prepared for winter, and followed at intervals of a month in winter and two weeks in summer, with a spray of 1 or 2 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 three sizes of cans: quarts, 35 cents; half gallons, 60 cents; gallons, \$1. If we haven't an agent in your locality we will send you a gallon, express paid, for \$1.

Chemical Department **Dakota Improved Seed Co.,** MITCHELL, S. D.,
U. S. A.

This Buckeye Incubator

Capacity 60 Eggs \$8.00

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 twenty-one years and there are over 225,000 in successful operation.

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

IF YOU KEEP CHICKENS YOU NEED AN INCUBATOR

Anybody can hatch chickens with a Buckeye

Sanitary Metal Brood-Coop

These brood coops are made of galvanized steel, with no seams exposed, and are completely rainproof. The No. 1 coop, weighing only twelve pounds, can readily be picked up and moved from place to place. Constructed in a knockdown 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 three 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 inches in the back, each, \$1.75; No. 3 coop, 23½x29 inches on the ground, same height as No. 1, each, \$2.50.

PATENT APPLIED FOR

H. and 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.

Prices—15-egg size, each, 15c; 6 for 70c; dozen, \$1.25; 30-egg size, each, 20c; 6 for \$1; dozen, \$1.75; 50-egg size, each, 30c; 6 for \$1.25; dozen, \$2.25.

H. and D. Chick Box

The proper ventilation has been the chief worry of shippers of day-old chicks, as they cannot stand drafts and varying temperatures. The H. & D. Chick Box has the same system of ventilation used in the H. & D. Fireless Brooder.

Prices—25-chick size, each, 20c; 6 for 80c; dozen, \$1.45; 50-chick size, each, 25c; 6 for \$1.15; dozen, \$2.

H. and 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.

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.

Prices—Each, \$1.90; 3 for \$5; 6 for \$9.50; dozen, \$18.

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 Lbs. Makes 100 Gals. of Rich, Nutritious Gruel

The time is past when calves can be raised at a profit on whole milk. Today 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 pound 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

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FREIGHT RATES FROM MITCHELL, S. D., IN EFFECT JANUARY 1, 1913.

Given in Cents per 100 Pounds, Less Than Car Lots.

Garden seeds, grass and clover seeds and potatoes go as third class; grain and corn as fourth class. A special seed rate is in force on certain grains to points in North and South Dakota west of the Missouri River.

	S. D.	3d	4th		S. D.	3d	4th			3d	4th
Salem,	.16	.12	Yankton,	.22	.17	Lincoln,	Neb.	.55	.45		
Sioux Falls,	.21	.16	Elk Point,	.27	.20	Omaha,	"	.46	.35		
Woonsocket,	.15	.11	Bridgewater,	.15	.12	O'Neil,	"	.74	.59		
Wolsey,	.18	.14	Canton,	.21	.16	Terry,	Mont.	.97	.74		
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	Le Mars,	Iowa	.30	.23		
Lemmon,	.65	.51	Faultkton,	.34	.26	Eagle Grove,	"	.51	.38		
Plankinton,	.14	.10	Gettysburg,	.39	.29	Sanborn,	"	.35	.27		
Chamberlain,	.20	.16	Hettinger,	N. D.	.72	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,	.41	.31	Cedar Rapids,	"	.57	.45		
Rapid City,	.73	.64	Fargo,	.68	.52	Des Moines,	"	.52	.40		
De Smet,	.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	.59	Worthington, Minn.	.30	.23	Dallas,	Tex.	1.51	1.31		
Underwood,	.90	.73	Winona,	.43	.37	Denver,	Colo.	1.10	.87		
Belle Fourche,	.97	.81	Minneapolis,	.43	.37	Casper,	Wyo.	1.60	1.33		
Buffalo Gap,	.96	.79	Duluth,	.66	.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.	.55	Ogden,	Utah	1.83	1.50		

CORN CULTURE IN THE NORTHWEST BY W. A. WHEELER

*Brown County
Yellow Dent
Corn*

Disco
GUARANTEED SEED

Extra Early Corn

Our Hobby—Special Varieties for the Extreme North

Ever since the Dakota Improved Seed Co. has been in business, one of the great aims of the company has been to grow and produce the best kinds of seed corn for the extreme northern states, where the profitable growing of corn is always an uncertain proposition. In order to do this it has been necessary to conduct a careful search and investigation to obtain the varieties most suited to the conditions for which they were intended.

To meet northern conditions one cannot take southern types of corn and immediately adapt them to the extreme conditions of the north, but must take the varieties that have been bred and grown in the north for years and are well acclimatized. We have been carefully studying the corn problem for several years and after much experimenting and careful tabulating of results, we recommend the following as being the best varieties for the North. We know that these varieties will produce corn, and good corn, if anything will.

The Brown County Yellow Dent probably ranks first among the extremely early dent varieties. Bred solely for earliness and yield and not for the show room. See photo of ten ears above, also a field of Brown County Yellow Dent in Harding County. See page 18.

The Early Pride is similar to the Brown County Yellow Dent but has a better type of ear and may be a few days later. Note photograph of ten ears at the left below. See page 19.

The Northwestern Dent is a very popular corn in North Dakota and a very good variety. Matures where others fail. Photograph below shows a farmer in North Dakota cutting Northwestern Dent with a binder. See page 20.

Disco Flint The best flint corn we have known. A good yielder and very early. None better. See page 25.

Minnesota No. 23. Introduced by the Minnesota Experiment Station as best for the extreme North. See page 20.

Disco White Dent. An early white corn about the same season as Minnesota No. 13. Adapted to central South Dakota. A prize winner. Try it. See page 21.

These and other good varieties of early corn are described in the corn section of this seed book on pages 15 to 25. All are specially adapted to northwestern conditions. If this book doesn't seem to cover your particular case write to us and also ask for a copy of our

New Corn Book We will send this book absolutely free to anyone writing for it and sending the names of five others interested in early corn. [See page 15.] Write for your copy before ordering your seed corn this season and study up on the best varieties for your conditions and how to handle them to secure best results.

Dakota Improved Seed Co.
Mitchell, S. Dak.

Disco
GUARANTEED SEEDS

THIS TRADE MARK IS YOUR GUARANTEE