Historic, Archive Document

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

U. S. Department of Agriculture.

American Mutual Seed Co.

HEADQUARTERS FOR
GRASS and FIELD SEEDS
SELLING AT LOWEST WHOLESALE PRICES

43RD-E. ROBEY STS.
CHICAGO. ILLINOIS

SEED GUIDE-SEASON 1920

RED TOP
THE HARDEST
OF ALL
GRASSES

A GOOD MEADOW IS ONE OF THE BEST CROPS YOU CAN GROW

ORCHARD GRASS
FURNISHES THE
FIRST GREEN BITE
OF THE YEAR

IOWA-103- THE CHAMPION EARLY OATS MAKING 100 BU. PER ACRE

OUR HIGH QUALITY SEEDS, LOW PRICES AND GOOD SERVICE WILL PLEASE YOU

Grow the Great Money Crop Alfalfa

A Field Like This Looks Good with Hay at \$25.00 a Ton.

Hardy Northern Grown Alfalfa Seed

We have made a careful study of the Alfalfa plant, and have found that many of the failures were caused by sowing seed not suitable for the particular locality. The Southern grown seed will not produce satisfactory results in the Northern and Eastern States, and on this account we handle nothing but the Northern grown seed, and are always in a position to save you money on the very best Northern grown seeds that can be secured. We make a specialty of the Nebraska, Montana, and Dakota grown seed, and being in close touch with the best growers in these sections it enables us to take good care of you on anything in the Alfalfa seed line. We have Alfalfa seed suitable for growing in any climate and our prices are always right.

Grimm Alfalfa

Resists Winter Blasts and Summer Droughts

This variety is considered the hardest specie of the alfalfa family. The secret of its success where others fail seems to be due to its more branching or lateral root system. This characteristic makes it less susceptible to heaving caused by frequent thawing and freezing where the ground is bare of snow.

Grimm Alfalfa gets its name from Wendelin Grimm of Carver County, Minnesota, who introduced it over thirty years ago. It has since been grown extensively in Southeastern Montana and Western South Dakota, where the most extreme conditions of heat, cold, and drought exist, the thermometer often registering over 100 degrees in summer and 40 to 50 below zero in winter. Being grown under such adverse circumstances has made it hardy enough to withstand the most adverse weather conditions.

This Variety Makes It Possible to Grow Alfalfa No Matter Where You Live

No matter in what part of the United States or Canada you are situated, you can grow Grimm Alfalfa. It's the variety that never disappoints. It always makes a crop. No re-seeding to be done. The older it is the better it gets. It has been grown for years under the most adverse conditions and it never winter-kills. It's the variety that will insure your alfalfa field against any kind of weather conditions.

Our seed is grown in the Black Hills district where the plants are often subjected to 40 to 50 degrees below zero with very little snow for protection. Alfalfa that will thrive there will certainly do so anywhere else that it may be sown.

As the price is rather uncertain at the time of going to press, we wish to refer you to price list enclosed, or better still, write for prices and an exact sample of the seed we will fill your order with.

Liscomb

This variety of Alfalfa secures its name from G. W. Liscomb, who first sowed it some thirty-five years ago in Eastern Montana. The old field is still in existence and is said to yield a splendid crop of seed each year.

The Liscomb Alfalfa belongs to the group known as Media. Associated with this variety in this group are the hardest varieties of Alfalfa that we have. The chief characteristics of this group are:

- 1st. The more branching root system.
- 2nd. The receding crown.
- 3rd. The variegated flower.

Often times the crowns on the group of Media or hardy strains of Alfalfa are 3 or 4 inches below the ground. The flowers of the alfalfa belonging to these groups are variegated and range from a greenish-white to a deep maroon, while the flowers of the ordinary alfalfa are blue in color.

This seed is grown for us in the Black Hills of South Dakota and in Montana. It is the very hardest strain of alfalfa that you can buy. Don't take the chance of having your alfalfa freeze out, but buy this hardy Northern grown seed and be sure of having plenty of alfalfa.

See Green List for prices.

Dakota Grown Alfalfa

In that section of South Dakota laying west of the Missouri River is the home of the hardy dry land strains of Alfalfa. In this section is produced the hardest Alfalfa seed in the United States. The severe winters to which these fields of Alfalfa have been subjected for years have changed the entire root system of the plants until you no longer have the one main tap root that so often breaks during the freezing and thawing of the winter months and causes winter-killing. Instead you have a branching root system that enables the plants to resist heaving and prevent winter-killing.

In our Dakota Grown Seed that we are offering you are getting seed that will produce plants with this characteristic, and seed that will produce a field of Alfalfa that will withstand the winters of any climate. This seed, we feel, is the cheapest Alfalfa insurance that you can buy.

Costs More—Worth It

This fancy, hardy, Dakota Grown Seed will cost you a little more money than other seed, but we believe that it is worth it. Our past experience has proven beyond a doubt that this seed will withstand the winters anywhere in the United States and in many portions of Canada.

We feel that in offering you this Hardy Dakota Grown Seed that we are offering you Alfalfa that can be relied upon to produce a crop.

We Make a Specialty of Dakota Grown Seed

We are very large handlers of Dakota Grown Seed. Our Mr. Killey, who handles the growing end of our Alfalfa Seed business, has spent the past 18 years in the Black Hills section of South Dakota and in Eastern Montana. He knows the best fields and the most careful growers, and you can depend upon the seed that we furnish you being right in every way.

We buy no Alfalfa seed after it has reached the terminal market, but secure it direct from the grower, and then we know just what we are furnishing you. We are in a position to furnish you the most reliable Alfalfa seed upon the market, and to furnish it to you at a price that will save you money.

Why We Can Make You the Best Price on Hardy Varieties

You will note in comparing our prices with those of other dealers that our prices on Hardy Strains of Alfalfa are quite a little below the prices asked by other dealers. The reason for this is simply that when you buy from us you are saving two or three middlemen's profits. We furnish you your seed direct from the growers. Before it is shipped from the Northwest our men inspect every bag. It comes direct to our big cleaning plant here in Chicago, where it is carefully cleaned, graded, and shipped direct to you. All lost motion is taken out of the transaction when you buy your seeds from us. There is one small handling profit and that is all. Whether you buy a bag or a carload, you get the advantage of our economical buying operations that save you money.

Don't fail to secure our latest quotations and our samples that we are always glad to send you, before buying your Alfalfa seed.

American

We are not satisfied unless You are.

Mutual Seed Co.

Between You and Me

The hour of writing my annual message to my many thousand customers always brings to memory many pleasant exchanges during the present year and thoughts that make one feel thankful for the acquaintance. The past year has been one of the biggest in our history and the many words of encouragement that we have received from all sections of the country make us feel thankful indeed, for the efforts we have put forth to save you money on the seed you sow.

When our boys were called to the colors and we had to fill their places with less efficient help, we, as well as yourselves, have had to work long hours and put up with all kinds of inefficient labor. All of these difficulties we hope are over. Our boys are all back that were Over There and we sincerely trust that you have been as fortunate. The thing to do now is, I feel, to face the future and turn our face on the most disagreeable past. Our Country stands today head and shoulders above them all. It is the paramount issue in the world of commerce. Its agricultural wealth is almost inconceivable. Now that we have established our supremacy, the thing to do is to make good. This can only be done by making our agriculture the most efficient in the world. Since the foundation of all agriculture is a good soil, and the only way to build up or maintain a good soil, is by carrying out the proper system of crop rotation, I feel that here is where we can be of real service to you.

No farm, no matter how good will long endure a one crop system. Most of our soils are already over-worked in our struggle to produce good crops. The thing to do now is to get the farm back to a regular system of crop rotation. Sow plenty of legumes and grasses this year. Increase your live stock production. The war ridden countries of Europe can now grow food crops, but it will be a good many years before their herds will be back to pre-war times. This means that the farmer that follows diversified farming is the one that will reap the profits during the reconstruction period. We will have to furnish the fats and meats for many years to come and the thing to do in 1920 is to arrange our farming so that the maximum number of animals can be produced. Live stock will not only increase your direct profits, but will help to build up your soil as well.

We have protected you on your seed this year by gathering together one of the largest stocks of field and grass seeds ever assembled under one roof. All of this seed has been secured at a price where we feel that we can sell it to you at a price so that we can save you a lot of money on your seed bill. This seed has all been carefully recleaned and tested and we are going to sell it to you at a price that will bring your order. We know that no seedsmen buy in any larger quantities and we feel that we can do business as cheap as any other firm in America. So feel that quality considered, we can sell you as cheap or cheaper than anyone else.

J. F. Summers, Secretary.

There are a few crops that I want to call your special attention to before you make up your seed bill this year. Chief among these are Sweet Clover and Sudan Grass. Sweet Clover is comparatively cheap in price this year and for a soil builder, it has no equal. It is, I believe, the greatest of all legumes and its ability to adapt itself to so many different soils and climates makes it one of the surest crops you can grow. The greatest crop of modern times for quick results is Sudan Grass. This crop can be sown at corn planting time and will produce two to three crops of the finest hay you have ever grown. A year like this, when hay is commanding the prices that it is, you certainly should not overlook sowing a liberal acreage of Sudan.

Our Green List that we are enclosing is based on the current market and we protect you on the price. We do not publish our price lists months ahead as some do, but give you the advantage of the market at all times. Be sure and get latest

prices at all times. We publish a new list every ten days.

Making a specialty as we do of Field and Grass Seeds, makes it possible for us to give your seed requirements, in this the most important branch of the farmers' business, better attention than those who devote the major portion of their time to other classes of seed, expending all our energy on Field and Grass seeds to furnish you those varieties that will give you the best results in your locality and to procure them for you at much less money than those who do not give this branch of their business their undivided attention.

I know that it is not necessary for us to tell you old customers who we are and how we can save you money, or that we can sell you the best seed for the least money that can be secured. There are some who have not favored us with an order, and to these new customers, I wish to say that I want you to get acquainted with this firm. I want you to get the real facts about us so that you will not hesitate to give us an opportunity of sending you the best and highest germinating seeds that can be secured for the least money, for we feel that if given the opportunity of demonstrating our square deal method of selling seeds that you will become one of our many satisfied customers.

Friends, I want to assure you of my hearty co-operation in every way possible to help you produce bigger and better crops. I am here to serve you in every way that I can and you will always find me on the job six long days every week, using every effort to see that you get the best seed your money can buy and crowding every department to see that your order goes out promptly.

Friends, I want your business and I feel that no firm in existence today can offer you the inducements, quality of seed, low prices, reasonable freight rates and courteous treatment that you can secure from the American Mutual Seed Company. Give us a trial and be convinced.

Sincerely yours,

J. F. SUMMERS.

An Unconditional Guarantee with Every Order

Here is an Absolute Guarantee to satisfy you completely, or refund your money and all of the freight charges you have paid on seeds from this firm.

We send you our signed guarantee with every shipment, good for the full amount of your order. You are protected when you buy from this firm.

A Guarantee Like This Is Proof of Fair Trading. We Could Not Give a Signed Contract to Satisfy You, If Our Goods Were Not Reliable.

We always endeavor to send our customers the best seed it is possible to furnish. We guarantee—unconditionally—that our seeds are of high germination, honest weight and honest value. If at any time within thirty days of receipt of goods, you are not satisfied for any reason, you may return the goods to us and we will refund your money and the freight charges you paid. No questions asked. We are

behind every penny's worth of seeds we sell and it must please you or we want it back. Remember we guarantee, high germination, honest weight and honest value. A signed guarantee goes with every shipment we make to you. It is good for the full amount of your order.

Can anything be more fair?

What Well Known Banks and Others That Are High in Positions of Responsibility Say as to Our Financial Ability, Character and Honesty

The First National Bank.

To Whom It May Concern:

Malvern, Ia.

It is with great pleasure that I am allowed to write these few words of commendation for Mr. J. F. Summers, Secretary and General Manager of the American Mutual Seed Company of Chicago. I have watched Mr. Summers grow from boyhood to manhood in this community and am free to state that he has made good in more ways than one. Mr. Summers has the practical and first hand knowledge, so essential in order to make a success of the seed business. Furthermore, Mr. Summers' connection with this firm will insure to the customer prompt and efficient service, a fulfillment of their promises and best of all, a square deal to all their patrons. Knowing that you will find Mr. Summers to be a man in whom you can put your trust, I beg to remain,

JAMES J. WILSON, Cashier.

Central Manufacturing District Bank.

To Whom It May Concern:

Chicago, Ill.

We take pleasure in stating that the American Mutual Seed Company are valued depositors of this bank. We consider them thoroughly responsible and amply able to fill orders entrusted to them in a satisfactory way. We are sure that anyone dealing with this company will be treated in a courteous, business-like manner. Yours very truly,

FRANK L. WEBB, Cashier.

Letter from the Editor of The Homestead, one of the leading agricultural papers of the United States.

Mr. J. F. Summers, Chicago, Ill.:

Dear Sir:—I understand that you are associated with the American Mutual Seed Company, of Chicago. I have enjoyed a personal acquaintance not only with yourself, but also with all of your associates, for nearly a quarter of a century. My business relations with the members of your company lead me to believe that the American Mutual Seed Company will very soon endear itself to its customers. I feel certain that Teddy's so-called "square deal" will be given to every one of your customers, as this is the principle upon which you and your associates have been conducting business since we first became acquainted.

JAMES M. PIERCE.

Iowa State College, Agriculture and Mechanic Arts. Division of Agriculture.

Ames, Ia.

To Whom It May Concern:

I have personally known Mr. J. F. Summers for a period of about ten years, and have been associated with him as a member of the State Board of Agriculture, and while he was a student in the Iowa State College.

I take pleasure in certifying that I have found him to be, in every way, capable, trustworthy and reliable, and I have entire faith in his business ability and integrity.

C. F. CURTIS, Dean.

This is a letter from the Assistant Secretary of Agriculture, and assures of expert knowledge along the lines of better seeds.

Washington, October 19, 1915.

To Whom It May Concern:

I take pleasure in stating that I have known Mr. J. F. Summers for a number of years, having been closely associated with him in farming and agricultural operations of various kinds and on a large scale. Mr. Summers was born and raised on a farm, is a graduate of Ames Agricultural College, has for years been a member of the Iowa State Board of Agriculture, and has taken a prominent part in the managing of the Iowa State Fair. For several years he devoted the major portion of his time to breeding and buying and selling high-class tested seed. He also managed between 2,000 and 3,000 acres of land for me, and brought this land up to a high state of fertility and productivity during the few years that he had it in charge. He is one of the best equipped practical agriculturists in the Middle West, being especially well qualified as a seed expert. Mr. Summers is a high-class man in every respect.

CARL VROOMAN.

A letter from Uncle Henry Wallace that we prize most highly.

Mr. J. F. Summers:

Des Moines, Ia.

Dear Sir:—We note with interest the progress of your seed company, with headquarters at Chicago. The need for strictly high-class agricultural seed seems to be growing constantly and the supply of such seed should be a promising field to me who, like yourself, have given much attention to better agricultural methods.

Very truly,
H. C. WALLACE, Editor.

B M BREED

GEO F BOOKER

J F SUMMERS
GENERAL MANAGER

J A KILLEY

E E ELDER

JAS A ORR

VICTORIA KRUS

MINA LYNCH

FLORENCE BICKEL

LORETTA FITZGERALD

C F OSSIAN

By Their Service You Shall Know Them

We, ourselves, always have a desire to see the people we are trading with and we know that you must feel a little as we do about it, so have prevailed upon each one of our Department Managers to have their pictures taken. We want you to feel better acquainted with the main cogs in this wheel that has made it possible to put out a million dollars worth of seed in a single month. Theirs are the guiding hands that keep your orders moving. It has been their brains and efforts that have made it possible to build up the largest field and grass seed business selling direct to the farmer in the world. We want you to know more about each and every one of them and in order that you may feel that every detail of your order is properly taken care of, we want to tell you a little about each one of these heads of the different departments.

J. F. Summers, General Manager, was raised on an Iowa farm. He is a graduate of the Iowa Agricultural College and has made the growing, developing and marketing of field and grass seeds his life study. He has traveled over a greater part of the United States studying crops and their adaptability to different sections of the country and different soils.

E. E. Elder, our Treasurer, is also a product of an Iowa Farm. He spent many years in an Iowa bank, and this experience gave him a good understanding as to how the farmers appreciate courteous treatment and good service.

James A. Orr is our Seed Cleaning expert. Jimmy, as he is familiarly called by all of us, has had a wide experience in cleaning all kinds of seed. He served his apprenticeship under the most skilled cleaners in this country and a few years ago, made a visit to Scotland, his native land, and so we feel that Jimmy is capable of cleaning your seed for you better than anyone else.

George F. Booker, our Farm Crops Expert, is a graduate of the Iowa Agricultural College. While in college, he specialized in farm crops. Since then, practically all of his time is spent studying crop conditions. We feel that he is capable of giving you real service in advising you in regard to different crops.

J. A. Killey, our Alfalfa and Sweet Clover expert, has spent the greater part of the past ten years in the Northwest and is known personally by practically every sweet clover and alfalfa grower in the Dakotas, Montana, and Wyoming, where our hardy strains of alfalfa are grown.

Loretta Fitzgerald is the one that makes it possible for us to answer the thousands of letters that we receive. It is upon her shoulders the responsibility rests of seeing that every inquiry that comes in is answered the day it is received. She has the best interests of our customers at heart at all times and uses every precaution to see that no detail is slighted in handling their correspondence.

Mina Lynch, is the one upon whom we depend to know where she can lay her hands upon every order and every letter that we ever receive from you. It is some job too, when you consider the fact that we average fifteen hundred inquiries a day and often during the busy season, handle that many orders. She is a native Chicagoan, but her knowledge of the people in your vicinity will surprise you, for she has read letters from many of them. It is a habit of hers to remember your address from your name or vice versa.

Florence Bickel, our Seed Analyst, is a native of Illinois. She received the foundation for her knowledge of seeds on a central Illinois farm. After graduating from high school, she entered the Government Seed Testing Laboratory at Washington, D. C., and after a thorough training there came to the American Mutual Seed Company as head seed analyst.

Victoria Krus, the forelady in our Mailing Department has had many years experience in bindery work. Her department is equipped with a machine that stamps and seals 250 letters a minute and another machine that fills and seals 30,000 samples a day, but even with these modern inventions, it is a big job to handle the many thousands of pieces of mail that go out each day.

Burr M. Breed, our Cashier, is an Iowan and served several terms as County Auditor of Union County. He came with the American Mutual Seed Co. about a year ago and we have found him very painstaking and careful in handling your remittances. He has a big lot of accounts to keep straight and his department is a very busy one, and anything that you can do to assist Mr. Breed in seeing that he gets prompt remittances on any shortages, I feel that he will appreciate.

C. F. Ossian, our Field Man, was for several years manager of a general store out in Iowa, but is proving to be an enthusiastic seed man. Clem, as he is familiarly called, by his office associates, has just one bad habit, and that's Sweet Clover. He will talk Sweet Clover day or night and they tell a story on him here that runs something as follows: He sees quite a crowd going into church one Sunday morning, so out of curiosity drops in. The attraction proves to be a funeral, and as there is some delay in the arrangements, the minister gets up and suggests that the friends of the deceased who wish to say a few words may do so. No one volunteers and as the suspension is rather awkward, Clem gets up and begs the minister's pardon, tells him that he is a stranger, but says if no one cares to say anything that if he will give him a few minutes he will tell them something about "sweet clover." This story we cannot vouch for, but the boys here in Chicago tell it on him, so I will pass it on.

Our Seed Testing Laboratory.

We Protect You on Your Seed Purchase

Every lot of seed we send out is subjected to a careful purity and germination test. Every bag must come up to our standard of purity and germination before being shipped. Why take any chances on your seed purchases when you can, by sending your order direct to us, secure the protection of having every lot of seed you sow tested for you. You know before you sow our seed that it will produce results. No guess work about the seed you secure from us. Every lot shipped subject to our Absolute Guarantee to satisfy you in every way or we refund your money. We give you your money's worth or your money back.

Every Tag Gives You the Purity and Germination

Every bag of seed shipped carries a tag stating the purity and germination of the seed. The tag tells you the percentage of seed that will germinate. It tells you the per cent of foreign matter and weed seeds. The tag in itself is a guarantee of fair dealing. You do not need to be a seed expert to buy your seeds from this reliable firm. You are not only protected on every purchase by an Absolute Guarantee but you have placed before you in black and white all the information you desire in regard to the seed you sow. We give you full information with every bag of seed you buy from us.

Services of Our Testing Laboratory at Your Disposal

We maintain at a big expense a complete testing laboratory equipped with the most modern seed testing apparatus. This laboratory is in charge of an expert seed analyst whose services are at your disposal. We want you to feel free to ask them for any information you may want regarding any seed you sow. Our seed testing laboratory, we feel, is a real service to our customers that they cannot secure from other sources. Remember this laboratory is maintained at our expense for your benefit and we maintain it not only to protect you on the seed you buy, but we want it to be a real Service Bureau for you, and we want you to feel free to call upon those in charge for any information you may wish.

Get Our Free Samples Before You Buy

When you are in the market for seeds write us. We will send you identical samples of the seed that we will furnish you and quote you close prices on the same. All we ask is an opportunity to show you what wonderful values we can offer you. We want you to compare our prices and samples with what others are offering. Give us a chance to show you how we can save you money on your seed order is all we ask. We conscientiously believe that we can offer you greater value for less money than any other firm. We leave the matter entirely with you as to the value of the seed we ship you. If you do not feel after receiving the seed that it is worth more money than you paid for it, return it to us and we refund your money. Could anything be more fair?

We Are Field and Grass Seed Specialists

We are specializing in field seeds; the age of "Jack of all Trades" is past and now the firm that makes a specialty of one particular line is the one that gives the "best value for the least money." Doctors have thrown their whole time and energies in studying one particular organ of the human body, and lawyers have devoted all of their study to one particular branch of law, thereby necessarily obtaining the highest proficiency in their chosen professions; and so it is in the seed business, for the man that devotes his entire time and specializes in the study of field and grass seeds until he becomes efficient is bound to give better service and at a lower cost to the farmer than the one who generalizes and handles a lot of other things besides field and grass seeds.

While we know the general seed business from "A to Z" and have conducted extensive trial grounds in garden and flower as well as field seeds, we have come to realize the fact that the man who specializes is the man who gives the service, and we have of late been giving special attention to field and more especially to grass seeds, and we are in a position to furnish you the best that grows.

Did you ever stop to consider the vast amount of grain and pasture seeded and the enormous quantities of grain and grass seeds raised each year? It means billions of dollars worth each year, all raised from seed. Then how important is the matter of your seed purchase. A farmer on a 160 acre farm will probably average a little more than a dollar's worth of garden seeds, while he will on an average spend from \$25.00 to \$75.00 per year on grass and grain seeds. Then why should not this be worthy of devoting special study and employing the best experts in this line and becoming so familiar with the growing, buying and handling of high-grade, tested, re-cleaned field and grass seeds that we can make better prices and serve you better than those that make grain and grass seeds only a very small part of their business. Just look over the seed catalogues that are coming to your home this year and count the pages that they devote to garden and flower seed, and how much to grain and grass seed. From $\frac{1}{4}$ to 1-10 is all you will find devoted to field seeds, the foundation of the wealth of the nation. Our seed book is an exclusive grain and grass seed catalogue, not only placing before you the best lots of field and grass seed ever offered for the least money, but bringing into your home a book filled with expert information on the soil requirements, seeding, tillage and harvesting of the principal farm crops by the leading farm crop experts in the business. We claim the proud distinction of issuing the first mail order exclusive field and grass seed catalogue in the United States, which will enable you to buy seeds that are purer, stronger in germination and better adapted to your conditions, and for less money. All we ask is a chance to prove it. Give us a trial order. Be friendly anyway, and write us.

Low Prices and Good Values are Found Only in Markets Naturally Equipped to Give Both. Chicago is Your New Market for Seeds

Getting down to the proposition of prices—here is an incident that happened in Chicago this summer. A man bought a basket of peaches at a retail store, had them charged and sent to his home. When his wife got to the job of getting them ready for canning she found a note in the bottom of the basket from the grower that read something like this: "I sold this basket of peaches for 56 cents—how much did you pay for it?"—then she signed her name and gave her address.

Friends, when we tell you this man paid \$2.50 for the basket at the dealer's store, you'll sit back and scratch your head because it is something for us to think about. If the producer—the farmer who shipped the peaches received 56 cents as his share,—and the consumer paid \$2.50—who got the \$1.99 profit and were the profit takers really entitled to it?

It is not our purpose to stir up against the middlemen who claim they have a right to existence and have a place reserved on this earth for them as well as the producer and consumer—but here—we're going to stand pat on our old time statement that when it comes to field and grass seeds there is absolutely no need for middlemen and their excess profits. They can be sold direct and these excess profits can be saved.

It is not fair—nor is it economy to let outsiders take unnecessary profits and let the farmer pay the bill. And besides, outsiders who do not fully understand seeds can get so badly balled up in the seed game that they won't know beans from cucumbers. Seeds have their values—and these values can only be brought out in the proper handling by men who are natural born farmers or seedsmen. We say seeds for the farm should be limited in sales to the producer, cleaner and grader, and the consumer. We say cut out the middlemen—let him milk the public on other lines if he can get away with it. Let him sell peaches but keep him away from field and grass seeds.

Most of the members of our firm have been brought up on the farm and know just as well as we know we're alive that the minute the extra profit is tacked on the seed by a middleman—the name changes from profit to graft and we're just game and big enough to fight this middleman proposition until we get through with the job; and we stand to "lick or get licked" in the words of our back on the farm days.

To begin with, suppose you raise a carload of clover seed that you sell to us. We clean it, grade it, and then distribute it to the farmers who did not raise clover seed but need it. Is there any need for us to sell it to Tom—let him sell it to Dick, who sells it to Harry and then let it finally reach the farmer all done up with gold bands of high prices. Is there any need of it? Isn't it just as practical for the farmer who needs it to buy direct from us who clean it and grade it, make it fit to use— Isn't the farmer who needs it entitled to get it without a truckload of extra profits tacked on?

It takes a lot of nerve for us to stand up and declare ourselves so openly—but friends, we have about 250,000 farmers on our list of customers who will stick by us and we have a punch backed up with some half million dollars of made on the farm money and we're going to let loose on this middleman proposition every time we get a chance.

When we started out to make this mutual organization a success we picked Chicago as the central location—the best place in the Country to carry on a big volume of business.

With all the big mail order houses, the big railroad terminals, the Stock Yards, the grain exchanges, making Chicago big, there is not a better place on earth to get down to a low selling price basis. Chicago is the "I Will" city—our firm is the "We Do", low price, direct sale seed house.

Our buyers go out early in the season backed up by cash to buy seeds in big quantities. Our own producing farms spend every effort to raise the best seed that can be raised. All this seed is shipped to our centrally located warehouses; it is cleaned in big modern mills, that work day and night to cut down running expense. It is then graded, sacked and held ready for the time when our farmer friends need it.

And because we buy direct from the grower and grow a good deal ourselves, because we buy in big lots for ready cash and sell only to the consumer—we say that we can sell you a better grade of seed for less money than the agent or dealer who lives on the excess profits that the consumer pays.

Don't be like the man who paid \$2.50 for a 56 cent basket of peaches. Go direct to headquarters—write direct to us and buy first handed and save yourself some money.

When you do buy seed through local dealers or agents—you burn up money and if you have money to burn—think twice—you can let loose of it in another way and get some real good out of it for yourself.

We have a genuine service to offer you in the matter of delivery. Again our central location makes it possible for you to save time and money in the way of delivery charges. Every point in the Country is in direct connection with the 26 big railroads that back up to our door. Can you figure the big saving when it comes to handling seed for a quarter million customers. This splendid shipping arrangement helps us make prompt shipments. It helps you because you are the one who gets the whole benefit of it all. The whole organization, friends, is the biggest thing in the world today. A mutual concern, every feature of it from buying, cleaning and distributing is so near perfect that it is a marvel in itself.

The famous "money back" guarantee that made mail order buying safe for the farmer is another feature not to be forgotten. Our policy is to satisfy you or return your money and delivery charges you have paid. When it comes to fair trade—again we say, "Ours is the 'We Do' concern." We guard our reputation like we do our bank account. There is not a man today in any part of the country who can say that he did not get a fair deal from the American Mutual Seed Company.

Don't hesitate, friends, to send us your orders. Trust this farmers' organization just like you'd have your neighbor trust you. Don't be like the man who bought the peaches, but come right to us; deal direct, save money and get a square deal and good value for every deal you make. And buy early—you won't save anything through delay.

For this year as a starter—join hands with us in our effort to make the middleman make his profits on something else besides field and grass seeds. When it comes to buying field and grass seeds go direct to a field and grass seed house, then you'll know you are getting a square deal with four corners—price, quality, delivery, and service.

The Proof of Any Proposition Lies in Its Application and Test. One Order Sent to Us Will Prove that We Can Save You Money—Give You Best Value and Best Service

American

We are not satisfied unless You are.

Mutual Seed Co.

The Clovers

Clover is probably the most widely grown of any of the legumes, and it has been styled the corner-stone of agriculture. It is used as a hay, pasture and soiling crop and often used as a green manure crop to be plowed under, and even where only the roots and stubble are plowed under it exerts a wonderful influence on the succeeding crop, for, by means of the nitrogen fixing bacteria on its roots, it is able to gather the nitrogen from the air and store it in the soil in a form which can be readily utilized as plant food by the succeeding crop; for experience shows that from 30 to 50 per cent of fertility is in the roots and stubble and that is why grain crop following clover is often doubled in yield, and you can always raise more bushels of corn, wheat or oats after clover.

Why You Should Send to Us for Clover Seed

We are very large handlers of Clover Seed, and buying this seed in car lots enables us to furnish you seed at a much lower price than the small dealer who only carries a few bags in stock. Having a well equipped cleaning plant enables us to give a better quality of seed than you are able to secure from the smaller dealer.

Another fact that should be taken into consideration when buying your Clover Seed is that when you secure it from us you get it from first hands and are not forced to pay two or three middlemen's profits.

We not only save you two or three dollars a bushel on your clover seed but we furnish you a better grade of seed. In comparing the prices of the small dealer don't compare the small dealers' prices with our Pinnacle Brand, for ten chances to one he doesn't handle this grade of seed. Compare his prices with those of our Economy Brand, or Country

Dealers Special. Pinnacle Brand represents the cream of the crop. It is not the seed you usually see on sale in the local hardware store but it's the grade of seed that satisfies the discriminating seed buyer, that appreciates good seed and knows good seed when he sees it.

We are among the largest handlers of Clover seed in America and feel that on this account we can say without fear of contradiction, that we can, quality considered, furnish you your clover seed at a price that will interest you.

Always Ask for Prices and Sample

Always ask for prices and samples of Clover Seed before ordering, as the market fluctuates so widely that we cannot make you a price at the time of going to press, for no one can foretell accurately just what future values will be, but we publish a special price list throughout the season, and will keep any customers who desire in touch with the latest market quotations. We cannot, however, scatter these price lists broadcast throughout the country, but remember a postal will bring you the latest market quotations. To those who are so far away that they cannot keep in close touch with market value, I wish to say that should there be any change in the market they will get the benefit of it and we will ship seed to the full value of the money sent.

When you buy seeds from samples sent out by us it means that you will receive seed identical with the sample and in that way you will know exactly what you are buying. Remember, we have taken special pride in our Clover Seed, and are glad to have you ask for these samples at any time that you are in the market, and our extraordinary equipment of the latest and most improved up-to-date cleaning and grading machinery makes it possible for us to furnish you the best grade of Clover Seed that can be secured, and our unsurpassed advantages in being in close touch with the market at all times, and being so located that we have no drayage expense, makes it possible for us to furnish you the best Clover Seed that can be secured for the money.

Our Clover Seed cannot be surpassed for purity, strong vitality, hardiness and stooling qualities, and as all of our seed has been run through the Scarifying Machine, no Clover Seed can surpass it in germination. To order once from our stock is to sow no other.

Crop Short—Order Early

The crop of Medium Red and Mammoth Clover is undoubtedly the shortest we have had in many years and we wish to urge upon our friends and customers to place their orders as early as possible. We see nothing to indicate that prices will be any lower and we feel that there is a possibility of seeing much higher prices before sowing time.

**PINNACLE
BRAND**
Represents
the Highest
Quality
of the
Crop

**UNIVERSAL
BRAND**
A Good
Serviceable
Grade of
Seed
that will
Give You
Good Results

Our Grades of Grass Seed

1. PINNACLE BRAND (EXTRA FANCY)
2. UNIVERSAL BRAND (FANCY)
3. ECONOMY BRAND (CHOICE)

We must necessarily handle more than one grade of seed. The reason for this is, First, it would be an utter impossibility to secure enough of our Pinnacle Brand Seed to do business, for only a small per cent of the crop is good enough to sell for this brand for it is Perfection itself, and this original stock must be carefully graded to produce this Extra Fancy Quality, leaving behind a lot of Fancy, Choice and Prime Seed that we could not utilize unless we handled more than one grade of seed. Second, we could not meet the demand of the public for a seed cheaper in price than our Pinnacle Brand, and as we do not offer our Pinnacle Brand Seed in competition with ordinary grades, we would be placed at a disadvantage, and while we handle only the best grades of seed we can secure, you can readily understand the necessity of handling more than one grade.

OUR PINNACLE BRAND (Extra Fancy). This is the very best grade of seed which can be secured. It is all nice, plump,

even colored seed, and has been carefully graded to secure seed of a uniform size. This seed is known among seedsmen as hand-picked seed, and if you want the best that grows, we have it in our Pinnacle Brand.

OUR UNIVERSAL BRAND contains seed which has been thoroughly re-cleaned, and unless you had our Pinnacle Brand to compare with it, you would call it extra fancy, for it really is one of the highest grades of seed, and gives splendid satisfaction.

OUR ECONOMY BRAND. This is our third grade seed. We offer this seed merely to meet competition and do not recommend sowing it. It will not pass the Illinois Seed Law and we will not ship it within the State.

SPECIAL LOTS AND COUNTRY RUN SEED. We often-times have small lots of seed that are of very good quality that we can make you a very low price on. This seed has just been cleaned through a farm mill, and many times is off color, but many of our customers sow it from year to year and secure good results. These lots are often purchased at a big sacrifice, and are offered out at a price that will move them quick. Watch our Specials for Big Bargains in Odd Lots.

Medium Red or June Clover **TRIFOLIUM PRAETENSE**

This is the standard Clover on 90% of the farms in the world. It is probably the most important of the Clover family. It can be grown in most any section of the United States except in the arid and semi-arid sections. Medium Red or June Clover is one of the easiest crops to grow. It is usually seeded with small grain in the spring and usually produces a fair crop the same year. It can usually be used to better advantage in a crop rotation than the other Clovers and this in a measure accounts for it being used so extensively.

This variety of Clover is, without a doubt, the backbone of our agriculture today. It would indeed be a hard proposition especially here in the corn belt to farm without the aid of this wonderful legume. It is one of the main sources of nitrogen, especially throughout the corn belt where the succeeding crop demands an abundance of nitrogen.

Medium Red Clover produces a very fine quality of hay. It cures quite readily and is high in feeding value. As a pasture crop it has no equal, where one only intends to pasture the land a short time and then put it into other crops. It builds up the land and produces an abundance of feed whether used for pasture or cut for hay. Timothy is usually sown with Medium Red Clover, and no other crop will give one the satisfaction that a nice Timothy and Clover pasture or meadow will.

We Are Large Handlers of Medium Red Clover

We handle enormous quantities of Medium Red Clover seed and rank up among the largest handlers of this crop in America. We are always in a position to quote you to advantage, and we feel sure that we can save you money on any Red Clover you may need. We are always glad to send you samples and quote you prices.

We Can Furnish You with Scarified Seed

We are in position to furnish you Scarified Seed. This is a big advantage that our seed has over the seed from other

dealers. By scarifying the seed it increases its germination about 40%, so you can readily see the advisability of sowing only our Scarified Seed.

Do not fail to secure our samples and prices before you buy your seed this year. We are always glad to send you samples and prices. See green list for latest quotations.

Facts About Medium Red Clover

1. It produces large crops of the very best quality of hay.
2. It works better in the crop rotation than any other legume.
3. It not only adds nitrogen to the soil, but improves the physical condition.
4. It is one of the greatest pasture crops known.
5. A seed crop is often worth more than the value of the land.

A Word About Price

The price of Clover seed cannot be fixed definitely. Clover like many other seeds is constantly fluctuating in price. On this account we prefer to make you special quotations by letter. We are very large handlers of this grade of seed and are often times able to get you in on an inside price.

Our superior cleaning and grading machinery makes it possible for us to furnish you the very best Clover seed that the money will buy.

Our Pinnacle Brand represents the very highest quality of seed, but if you desire a cheaper grade we have it and can save you money on every purchase.

We furnish you a guarantee with every bushel of Clover seed that we send out. Every lot is guaranteed to be satisfactory to you in every way. Test it in any way you care to and if it isn't right, we make it right. We are here to please you. Send us an order and be convinced of the big values we are offering.

Our Pinnacle Brand of Clover Seed Produces Wonderful Crops.

Mammoth Red Clover

This variety of Clover is also called Sapling or Pea Vine Clover. It is a strong, vigorous grower, and produces an abundance of forage. It has been criticised by some because of the hay being too coarse. Regardless of this fact, however, it is one of the most valuable of the Clover family.

Mammoth Clover is grown quite extensively throughout the Northern and Eastern States. Because of the fact that it ripens somewhat later than Medium Red Clover, many prefer it when Clover is grown in connection with Timothy, as the two crops ripen about the same time.

Mammoth Clover is without a doubt one of the greatest fertilizers grown. It is very hardy and produces an enormous tonnage, and its quick, hardy growing characteristics make it especially desirable for pasture. In the northern part of the United States where they can grow only one crop of Clover during the season, it is very popular.

It is the great crop that not only brings in an enormous revenue but builds up run down farms in a remarkably short time. This crop is especially suitable for growing on very thin land when a strong vigorous growing Clover that will add a large amount of humus to the soil is desired. It is claimed for it that it is more hardy than the Medium Red Clover and that it will succeed where the other clovers will fail. Mammoth Clover will undoubtedly be scarce this year and we wish to urge upon you to secure your seed as early as possible to insure getting it.

Crimson Giant or Incarnate Clover

The importance of this wonderful Annual Clover is becoming more and more realized each year. It is especially desirable as a green manure crop, and because of its fertilizing qualities is used extensively throughout the South.

This crop, while it grows luxuriantly on the rich, fertile, loam soils, fulfills its real mission when grown on the light poorer soils, as it will thrive on soil too poor for growing Red Clover successfully. When grown for fertilizing purposes this Clover is usually sown in the fall, used for a cover crop during the winter and plowed under the following spring. Plowing under a good crop of this Clover is equivalent to 20 tons of stable manure, and is the cheapest source of nitrogen known. It has been the means of placing thousands of acres of poor land upon a profitable basis.

Feeding Value. This crop when properly cut for hay is superior to even Red Clover, being richer in protein. It is especially valuable for silage purposes, is especially relished by dairy stock, and the enormous yields of silage which it produces per acre makes it a crop which is of great value to the dairy farmer. Write for samples and prices.

Lespedeza or Japan Clover

Lespedeza Stata

This plant, which was accidentally introduced into the United States about 60 years ago, has now spread all over the Southern States and into Kansas and Pennsylvania. It is highly esteemed as a constituent of pastures, and in some sections grows so luxuriantly that splendid crops of hay are cut. It sometimes grows to a height of 24 to 30 inches. Where the stand is very thin the plants have a prostrate habit, but where it is thick they grow upright. Many times yields of

hay exceeding two tons per acre are secured, and in exceptional cases three or even four tons.

Under conditions where Lespedeza is adapted it is proving to be a crop of exceptional merit. As the true merits of the crop become more widely known its popularity increases. It takes practically the same growing season as Cow Peas and Soy Beans. It grows on all types of soil and furnishes forage on barren, gravelly wastes where no other crop will grow. It will withstand any amount of grazing and is very similar in feeding value to Alfalfa.

Lespedeza is a very valuable crop for growing in combination with Red Top or Bermuda Grass, and the experience of farmers and the result of experiments have developed many different methods by which the crop can be grown with wonderful success. See green list for prices.

White or Dutch Clover

This variety of Clover is a great favorite in lawn or pasture mixtures, and is usually sown in combination with Blue Grass. It is a low growing, shallow rooted variety, and its chemical analysis shows it to be much richer in protein than any other Clover. The seed is very small and high in price, which has in a measure kept it from being more generally sown. See green list for prices.

A Word About Price

The price of Clover seed may look high to some of you this year, but such is not the case when you compare the value of a bushel of Clover with that of other farm crops. At this time it is not possible to put a price on Clover seed, but it will no doubt be high as well as other farm crops. We wish to caution you against neglecting to sow Clover this year for with conditions as they are, it is up to every farmer to keep his farm in as high a state of cultivation as possible this year.

GROWING THE CROP

SOIL.—Clover makes its best growth on rich, fertile, well drained limestone soil, but will flourish on most any soil where there is sufficient rain fall, if the seed is inoculated; for Clover will grow and flourish in a soil that is low in nitrogen as long as there is a sufficient supply of bacteria to start the plants until they have an opportunity to develop tubercles on the roots for the purpose of gathering nitrogen from the air and storing it in the soil.

PREPARATION OF SEED BED.—Clover is quite often seeded in the spring on winter grain, in which case no special preparation of the seed bed is necessary, as the frost usually checks the ground sufficient to form a covering for the seed. When sown with a spring grain crop, no special preparation of the ground is needed except that given the land for the grain crop, but the seed bed should be fine and rather firm in either case to guarantee prompt germination.

SEEDING.—Clover is often a failure because it is not planted deep enough to secure proper moisture conditions. On clay soils it should be planted one inch deep, while on light sandy soils it should be planted one and one-half to two inches deep. It may be seeded in the autumn about six weeks before frost or in the early spring. Many follow the practice of sowing Clover on the snow in the early spring, but we question very much the advisability of this method as the wind often piles up the seed or the snow goes off with a rain, thus washing the seed in piles. Very good results have been obtained, however, by sowing on the ground after the snow has melted and while the ground is still freezing and thawing.

There is a wide difference of opinion as to the amount of seed to sow, but we have always followed the practice of putting on six quarts, and I believe we have every reason to feel proud of our past success in securing successful stands.

Alsike Produces Wonderful Crops of the Very Finest Hay.

Alsike (Trifolium Hybridum)

This wonderful Clover is becoming very popular throughout a vast area of the country. It will grow successfully over a wider range of soil and climates than any of the other Clovers. While it is especially adapted to cool, moist climates, it is capable of adapting itself to many adverse conditions and is very popular for growing on soil slightly acid where no other Clover can be grown.

Alsike is a perennial, and because of this characteristic is especially valuable for growing on land where one wishes to secure a permanent pasture or meadow. Because of its not being susceptible to heaving and winter killing it is a very valuable crop to grow where climatic conditions make it hard to grow other Clovers.

Alsike the Great Crop to Grow in Combination with Other Grasses

Alsike when grown in combination with grasses makes one of the best combinations either for hay or pasture that can be grown. It is a perennial the same as most grasses, and this feature is especially commendable for growing it in combination with grasses. Timothy and Alsike produce one of the best crops that can be grown for hay or pasture. It not only forms a thick bottom, thereby increasing the yield, but being a legume it greatly increases the feeding value of the crop.

We handle a mixture of Alsike and Timothy that has been grown together, and as we are unable to separate it, we can make a very low price on this seed. Write us for special prices on Alsike before buying your seed, as the market fluctuates considerably and we are unable to make you a firm price at this time, but when you are ready to buy just drop us a line and we will quote you firm prices, together with samples of the identical lots which we are offering you, thereby enabling you to see just what you are buying.

Alsike Very Valuable for Growing on Wet Land or Land Slightly Acid

Alsike is especially valuable in reclaiming wet lands. and will produce a wonderful crop where nothing but swamp weeds formerly grew. It is not injured by over-flowing, providing water does not stand upon it for too great a length of time, and it has been found to be of great importance in reclaiming districts through which drainage canals have been constructed, as it seems to be especially adapted to the low lying soil, and materially aids in getting such tracts of land in shape for future cultivation.

Much of the very best land in some sections is slightly acid and prevents one from growing Clover upon it without first giving it a heavy application of lime, and while Alsike prefers a soil rich in lime, many are growing it with marked success when no other legume would grow. Its adaptability to grow on such land has been a great factor in the agricultural success of such sections, as it has saved the farmers thousands of dollars for commercial fertilizers.

Alsike Rich in Feeding Value

Alsike produces the very finest quality of hay or pasture that is very rich in feeding value, especially so in protein. Some authorities have advanced the theory that Alsike produces eruptions of the skin when pastured by horses. The actual experience of the growers have failed to fault it for this fact.

From every source comes nothing but words of praise for this wonderful crop, and reports of its heavy yields. Alsike is preferable to other Clovers for growing in combination with Timothy and other grasses, because of the fact that it does not grow so coarse and produces a finer quality of hay.

Reasons Why You Should Grow Alsike

- 1st—It is a legume and will enrich the soil.
- 2nd—It can be grown on wet land where no other legume will grow.
- 3rd—It can be grown on land that is acid.
- 4th—It is rich in feeding value.
- 5th—It is a perennial, and when once you get a stand it will endure for years.
- 6th—It greatly increases the feeding value and yield where grown with the grasses.
- 7th—It does not take as much seed to sow an acre as it does of other Clover.
- 8th—It is not usually any higher in price than other Clover.

The Value of Alsike Not Fully Realized

Only within the last few years has the real value of Alsike begun to be appreciated. It has enabled thousands of farmers to grow Clover who could not do so before because of the acidity of their soil. Because of the fact that this crop has made it possible to grow Clover on this land has been worth thousands of dollars to the American farmer. Teamsters and others have come to appreciate the value of Alsike within the last few years, and today Timothy mixed with Alsike commands the very highest prices on the market.

Alsike Valuable as a Seed Crop

Alsike is one of the most valuable crops that can be grown for a seed crop. It seeds very heavily and the setting of the seed is not as susceptible to weather conditions as other Clovers. Alsike not only produces a very heavy crop of seed, but the seed usually commands a very fair price. We do not know of any way by which you can make money any easier than by growing a crop of Alsike for seed. It is easily harvested and easily threshed. **Grow Alsike for Seed.** It will make you more money than any crop you can grow.

We Can Save You Money on Alsike

We are in a position at all times to save you money on Alsike. Handling large quantities of this seed as we do enables us to make a big saving for you on Alsike, as we are in close touch with conditions in the Alsike growing sections and can at all times give you the very best that the market affords. See green list for latest quotations.

GROWING THE CROP

SOIL—Alsike prefers a rather cool, moist soil, but can be grown on most any soil where any crops will grow.

PREPARATION OF THE SEED BED—No special preparation of the seed bed is needed, and all that is necessary is to give the seed a light covering.

SEEDING—Alsike should be seeded at about the rate of 1 bushel to 8 acres, and the best results are obtained by sowing in connection with a light seeding of small grain.

HARVESTING—The method of harvesting depends upon to what use you wish to put the crop, as it may be pastured, cut for seed or for hay. If cut for seed a common mower with a bunching attachment is the most practical method, and when cut for hay it is handled the same as any other hay crop.

Pinnacle Brand of Alfalfa Seed Produces Heavy Yields.

Alfalfa, the Greatest of All Forage Plants

Probably no other crop in the history of the nation has been the means of extending agricultural development over as wide an area or to as great an extent as Alfalfa. From the arid West to the humid sections of the Corn Belt, it is making it possible to grow upon the farm a greater number of cattle, hogs, horses and sheep than it was ever possible before Alfalfa entered the realm of the live stock farmer.

Success with Alfalfa Depends to a Great Extent Upon the Grower

Alfalfa is an easy crop to grow if proper precautions are taken, but it is absolutely necessary to sow only the best seed obtainable to secure the best results in growing Alfalfa. The reason for this is, no one should use seed from a more temperate climate than that in which he wishes to grow his crop, for no one feature is so essential as to secure good, hardy seed stock. Alfalfa is no longer an experiment; it is a reality. But still numerous farmers persist in experimenting with it—that is, they try to grow it by using a cheap grade of seed, by not preparing the seed bed, by not inoculating, and by sowing it upon sour soil without the use of limestone; and any one of the four mentioned conditions is enough to keep one from securing a stand of Alfalfa. To this class of farmers may be attributed the reason for Alfalfa not being sown in certain sections, for they have by their slipshod methods tried to impress upon the entire community the folly of trying to secure a stand of Alfalfa, claiming, because they had failed by their slipshod methods, that it could not be grown in the neighborhood, while as a matter of fact, Alfalfa can be grown in every state in the Union, and in 99 per cent of the counties and on 99 per cent of the farms. This is not a "wildcat" statement, but a truth based on actual statistics, so do not hesitate about attempting to grow this great crop, because some one in the neighborhood has tried and failed, for you cannot afford to be without it upon your farm. It will be worth double to you what any other crop has been that you have grown, and we will venture the assertion that if you will follow the simple directions set forth in this Guide for securing a stand that you will not be disappointed.

Our Pinnacle Brand Seed the Best

When buying Alfalfa seed, you cannot afford to use seed that has been grown under climatic conditions not suitable to the production of high class seed. Remember when ordering your Alfalfa seed that we handle the very choicest qualities that can be grown, and we sell no irrigated or imported seed. Our seed stock is grown exclusively for us in the Northwest, where some of the largest growers in Nebraska, Montana, and the Dakotas send us their entire crop. Our prices are the most reasonable that you can secure on the quality of seed which we handle, for we send our buyers right into those sections where Alfalfa seed is grown in the highest state of perfection, and buy the entire output of the whole community, thereby securing our stock at prices lower, quality considered, than any competitor who handles seed in smaller quantities can meet.

All our seed is backed by our Absolute Guarantee, and sold subject to State and National test, and is all shipped to you

on approval. If you do not find it satisfactory in every way, ship it back and we refund your money, for we are not satisfied unless you are.

We handle the same grades of Alfalfa seed that we do of Grass Seed, and we wish to call special attention to our exceedingly low prices on Pinnacle Brand seed in five bushel lots, for we believe that in this grade of seed we are offering you the best that can be secured at any price.

Grow the Great Money Crop

Don't miss the opportunity to produce two tons of high-priced feed stuff where only one grew before. While Alfalfa growing is only in its infancy in the Northern and Eastern States, the farmers are beginning to appreciate the wonderful possibilities of this great crop, as indicated by the enormous increase in sales of Recleaned Alfalfa Seed, showing that Alfalfa is being grown in the North and East upon the most prosperous farms in those sections.

Get in line, get some of the seed of this great revenue producer. Don't let your neighbor grow better and bigger crops than you do simply because he grows this great legume, and after harvesting twice as much hay per acre as he could from any other crop he has his land in such a state of productivity that he can grow twice the number of bushels per acre that you can.

Be progressive. This is the age of brains; don't try to squeeze out a bare existence by plodding along the same old rut year after year. Take advantage of the possibilities of doubling your income by growing this great money crop, Alfalfa.

Alfalfa Gaining Favor in the Eastern States

It was formerly thought that Alfalfa was adapted only to sections of the West, but it is today being grown in practically every state in the Union and is proving of great value wherever grown. Alfalfa will undoubtedly produce more feed upon an acre than any crop that can be grown. The returns that an acre of good Alfalfa will bring exceed that of any other crop. In sections of the country where a large amount of feed must be grown upon an acre Alfalfa can be depended upon, and if you are not growing it and wish to produce more upon an acre than you have ever grown before, sow Alfalfa.

Hardy Northern Grown Varieties Will Not Winter Kill

Alfalfa can be grown in the northernmost portions of the United States providing hardy northern grown seed is sown. In fact, it is sown several hundred miles north in Canada.

In recent years great progress has been made in introducing Alfalfa into the Northern and Eastern States, and it has been proven beyond a doubt that it is especially adapted to those sections if good northern grown seed is used. No other legume will withstand the drought and cold that Alfalfa will and produce such enormous crops. As a money crop you cannot beat it, and it will produce more tons of succulent food than any other crop that you can grow.

We are the Largest Handlers of Hardy Strains of Alfalfa in America

We are considered authorities on Alfalfa Seed because of the fact that we probably handle as much Alfalfa Seed as all the other Seed firms selling direct to the farmer put together in the Central States. Some of the dealers farther west who cater especially to the Western trade and handle those types of Alfalfa that are particularly adapted to those sections, handle approximately as much seed as we do. But we lead all others, however, in handling only those varieties especially adapted to that section from Chicago east. Since we have made a careful study of the requirements in your section we feel that you cannot do better than to trust your Alfalfa Seed order to us, for we feel that we are in a better position to take good care of you than any other seedsmen. We are exceptionally well supplied this year with a fine lot of Dakota grown seed, and we wish to urge upon you to try some of this seed this year and be convinced of its exceptional qualities.

Our standard grades of Alfalfa are invariably Northwestern grown. The Alfalfa seed grown in our producing sections will produce more vigorous and hardy plants. We feel that we cannot recommend this seed too highly to you and we certainly wish to urge upon you to sow it in preference to seed grown further south.

Common or American Alfalfa

This is the variety of Alfalfa that is grown on the majority of farms in the United States. The seed that we are offering you in this variety has been grown in the far Northwest under conditions that make it especially suitable for the Northern and Eastern States. We want to urge upon you to secure some of this seed for we know that it will give you the very best of results. Write today for samples and prices. The crop is very short this year and it may be that later you will be unable to secure suitable seed at any price.

Turkestan Alfalfa

This variety of Alfalfa was introduced by the United States Agricultural Department in 1898. Coming from a semi-arid region, as it does, it is naturally drouth-resistant and well adapted to dry-farming districts of the West. It very much resembles the common Alfalfa; in fact, it is hard to distinguish between the two. While it does not produce the rank growth of foliage that the common Alfalfa does in the more humid sections, it is without a doubt the more desirable variety for growing under dry land conditions. Write for sample and prices.

Cossack Alfalfa

The Hardest Yielding Strain of Alfalfa Known

This wonderful strain of Alfalfa was imported into the United States by Dr. N. E. Hansen, Vice-Director of the South Dakota Experiment Station and conceded by all the foremost Alfalfa experts in the United States. Dr. Hansen discovered this variety of Alfalfa in the dry arid Russian Steppes when 40 and 50 degrees below zero was not at all uncommon. This variety is so hardy that in our field of 40 acres in Western South Dakota, which has been carefully checked up, they have found that not a single plant has been winter killed.

Some Astounding Facts Regarding Cossack Alfalfa

1. A single plant has been known to weigh eight (8) pounds.
2. A single plant has grown the height of a man.
3. A single plant produces 1,000 shoots.
4. It will increase the yield of hay from one and one-half to two tons per acre.
5. The plants are so immense that they have to be planted 2½ to 3 feet apart, in rows like you would corn.
6. The tops of the plant are 10 to 12 feet across.
7. It is so hardy that it is an impossibility for it to heave out or winter kill.
8. It only requires 3 pounds of seed to the acre of this variety.

A Word About the Price of Alfalfa Seed

The price of Alfalfa seed this year may seem a little high to some of you but such is not the case, when you take into consideration the crop that it will produce. A bushel of Alfalfa seed will sow 4 acres from which you should harvest at least 25 tons of hay. Figuring the hay worth \$25.00 a ton and you have a crop that will bring you \$625.00. We do not know what Alfalfa seed will be worth at sowing time but we do know that the crop is short, and our advice is to protect yourself on what seed you will need as soon as possible.

GROWING THE CROP

Soil. Alfalfa is very particular about the soil required for its best development; in fact, more failures in securing a stand can be attributed to not paying attention to the requirements necessary in placing the soil in condition to grow Alfalfa than upon any other one thing. The soil for the production of Alfalfa must be well drained. Alfalfa, as the often repeated statement is made, "will not stand wet feet." Alfalfa will not thrive upon a sour soil, and any soil which changes the blue litmus paper from blue to pink will not grow Alfalfa until a good supply of limestone has been incorporated into it. Good drainage and ground limestone, together with proper inoculation and pure seed seem to be the chief pre-requisites for successful Alfalfa culture, especially in Illinois.

Preparation of the Seed Bed. The seed bed in this section should be plowed as early as possible, or better yet, summer fallowed; it should be worked into a fine state of cultivation, and any extra work put upon the seed bed will be more than repaid by the extra yield produced, and in the uniformity of the stand secured, for one of the first considerations in the handling of the field is to get rid of all weeds.

Seed and Seeding. Get good, pure, unadulterated seed. It is not only necessary that the seed should be strong in germinating qualities but should be free from noxious weeds, and be of a variety the seed stock of which is grown in such a locality as it will meet the requirements of the section in which you wish to grow the crop. The seed should also be inoculated in order to secure a strong, vigorous growth of young plants, and although Alfalfa will thrive in many sections without inoculation, the extra growth secured from inoculation always many times more than repays one for the extra cost. It should be sown at the rate of from 12 to 15 pounds per acre. The time depends upon the latitude, season, and condition of the land. In some sections it is sown as early as April, but more is sown in May.

Sowing with a nurse crop is becoming popular and barley, especially the beardless, is found to be the most satisfactory nurse crop.

OUR ALFALFA
BACKED BY
AFFIDAVITS
OF RELI-
ABLE GROW-
ERS.

TO WHOM
IT MAY CON-
CERN: I hereby
append my
signature to
sworn statement
as follows: The
Alfalfa Seed
sold and delivered
to the American
Mutual Seed
Company of
Chicago, Illi-
nois, fall 1919,
is pure and un-
adulterated Cos-
sack Alfalfa
Seed, descended
from plants
secured from
Professor N. E.
Hansen, South
Dakota State
College in 1912.
(Signed)

A. F. MILLS.

Subscribed
and sworn to in
my presence this
1st day of Octo-
ber, A. D. 1919.
(Signed)

JOSEPH E.
WITTEN,
Notary
Public.

A Letter from
One of Our
Growers Giv-
ing Some
Facts Worth
Knowing in
Regard to Cos-
sack Alfalfa.

Prof. N. E. Hansen with One Single Plant of
Cossack Alfalfa.

Wall, South Dakota, October 1, 1919.

American Mutual Seed Co., Chicago, Ill.

Gentlemen:—Having sold to you, through your agent, Mr. J. A. Killey, my 1919 Cossack Alfalfa Seed, I feel that a short history of this wonderful Alfalfa is "meet and proper."

This seed is directly descended on my farm from plants sent me by Prof. N. E. Hansen of South Dakota State College, Brookings, South Dakota. It is grown on "dry upland" nearly 400 feet above the Cheyenne River, Western South Dakota. Here and elsewhere, where tried, it has proven greatly superior to other varieties in its resistance to drought and cold as well as producing a heavier growth of foliage, the leaves being very heavily massed on the plants. When nearly matured it does not shed its leaves as do other kinds. Its crown and roots spread greater each year. It also recovers very rapidly from cutting.

At this time I have about 70 acres of Cossack and expect to sow 40 acres more next spring. Feeling sure that you will make no mistake in pushing Cossack, I remain,

Sincerely yours,

(Signed) A. F. MILLS.

Harvesting. The time of harvesting will depend upon whether the crop is to be cut for hay or seed. In cutting the Alfalfa for hay the best time to start the mowers is just as the young shoots of the second crop are commencing to start. Alfalfa cut at this stage not only produces the most palatable and nutritious feed and the greatest number of tons per acre, but it seems to have the effect if it is allowed to stand until this stage of helping the second crop along, and it will only be a comparatively short time after the first crop is removed until you can start moving on the second crop.

What Mr. Killey, our Alfalfa Seed expert thinks of Cossack Alfalfa.

Philip, South Dakota, September 25th, 1919.

American Mutual Seed Co., Chicago, Ill.

Attention Mr. Summers,

Dear Sir:—Have just returned from a 250 mile drive and have inspected some very fine fields of Grimm and Cossack in the last few days. I become more and more enthusiastic over the Cossack variety as I see more of it. I have seen this crop produce the best crop of Alfalfa that I have ever seen grow, on land and under conditions you would not think it possible for a plant to live.

I feel that we are making a mistake in not urging the sowing of this variety enough in the Eastern and Northern States, for I feel that it would work out equally as well for them as it has here in the Northwest. I am picking up every good lot of this seed that I can contract, for I feel that we will be doing our customers a real service in getting this seed for them.

This variety only requires three pounds of seed per acre, and even though it does cost more than a dollar a pound, it is not as expensive to sow as the common varieties, and it will double the yields of the common kinds.

The growers here follow the plan of sowing the seed with a garden seeder set at celery at the rate of from 2 to 3 pounds to the acre, in rows 3 feet apart, and I feel that this is the best plan to recommend to our customers.

I want to urge upon you, Mr. Summers, to get this crop before our people, for I believe the Cossack Alfalfa is one of the best things we have had to offer our customers in many days and it will make them double the money any seed will that you could sell them.

Very truly yours,

(Signed) J. A. KILLEY.

Don't Speculate On Your Crops

Inoculate Your Seed, Begin Right to End Right, Use Tubercle-Germ to Make the Best Seeds Better

Inoculation Insures Results

Pure cultures are making money for farmers in every country in the world. Why not try fifteen or twenty acres? Better sow ten pounds of seed per acre which has been inoculated than twenty pounds which has not. Make sure of your clover and alfalfa crop. Don't take any chances. Seed and labor cost too much to have a failure when you can insure yourself against a failure in getting a stand by using Bacteria Tubercle-Germ. Only a little extra time and not much extra labor to properly inoculate, so you will be taking no chances in securing a stand.

It restores and maintains soil fertility. It works like yeast on bread and when properly mixed with the legume seed before planting brings nitrogen from the air into the soil, making the plant more healthy and vigorous, besides storing up plant food for the succeeding crops.

The seed of clover, alfalfa, sweet clover and the other legumes cost too much money to sow without inoculation, for you not only run the risk of not securing a stand, but the plants only reach their maximum production when abundantly supplied with these tubercle-gathering bacteria.

Our Tubercle-Germ is bred and prepared in the best laboratories in the United States by the best experts that money will hire, who use only the latest and dependable scientific formula known. In this preparation the bacteria which produce the tubercles on the roots of the legumes are put up in an available form for the successful inoculation of the seed of these crops.

These bacteria are absolutely essential in order for the crop to restore the fertility of the soil, and produce the growth necessary to yield a satisfactory crop. Should these bacteria not be present, the legume not only produces an unsatisfactory crop, but uses up the fertility in the soil instead of building it up as it does when these bacteria are present.

To Insure the Best Results Inoculate

All the leading agricultural authorities endorse the Pure Culture method of inoculation.

Write your Experiment Station in regard to inoculation.

Clover Seed is high this year and you cannot afford to not inoculate.

Take up the matter with the Federal Department of Agriculture. Ask any farmer who has ever inoculated his seed. It always means bigger crops and insures success.

Tubercle-Germ Absolutely Guaranteed

This Pure Culture preparation is put up in bottles ready to use, and every bottle is guaranteed to give perfect inoculation to the seed for which it is prepared, or we will refund your money.

We have a special Bacteria Tubercle-Germ for each of the following legumes:

Sweet Clover	Cow Peas
Alfalfa	White Clover
Mammoth and Red Clover	Soy Beans
Crimson Clover	Field Peas
Alsike Clover	Vetch
	White Navy Beans

Be sure and mention the crop which you wish to inoculate in ordering Tubercle-Germ. Remember inoculation is not a seed expense but a crop insurance. It is not an expense but an investment, that means 100 per cent dividends on the original cost.

Easy to Use Low in Price

Makes every
acre yield a
real crop.

The bacteria are carried into the soil with the seed in sufficient numbers to insure inoculation of the roots, thereby increasing the growth of the crop and making it possible for the young plants to gather nitrogen from the air and store it in the tubercles on their roots, where it becomes available for the succeeding crop.

Easy to Inoculate with Tubercle-Germ

- 1st. Pour the seed out on the floor.
- 2nd. Then add what water to the Tubercle-Germ that you think it will take to moisten what seed you have.
- 3rd. Thoroughly mix or stir the seed and spread out on the floor to dry in a dark place.

CAUTION—Do not expose the seed to the sunlight after treating with Tubercle-Germ until you are ready to sow.

Why Take The Chance?

Inoculation with Tubercle-Germ is not an experiment. It has been demonstrated in all parts of the United States that the reason for not securing a stand of the legumes is caused by not sowing seed which has been inoculated more than to all other causes. Why take the chance of losing a crop when you can secure Tubercle-Germ at such a small additional cost? Insure a stand. Write today and secure Tubercle-Germ, the pure culture, which is guaranteed and sold at a price that is right.

Our Prices Are Low

The standard price of this Pure Culture is \$2.00 per acre; 5 acres, \$9.00; and as our culture is equal to the best upon the market and is fully guaranteed, we can make a big saving for you by using our wonderful nitrogen-fixing bacteria.

TUBERCLE-GERM

½ Acre Size	\$.60
1 Acre Size	1.00
5 Acre Size	4.00
10 Acre Size	7.50
20 Acre Size	14.00

Not an Expense But a Crop Insurance

A Few Facts Worth Knowing About the King of Legumes

1. Sweet Clover will produce a greater cash income per acre than any other crop.
2. It is the greatest soil builder known, not only because of its ability to take nitrogen from the air and store it in the nodules on its roots, but because of the large amount of humus added to the soil from the decay of its roots.
3. Sweet Clover will grow in soils too low in humus content for any other legumes.
4. The large roots of Sweet Clover facilitate drainage and do much to break up and improve the texture of the soil lying below the reach of the plow; as the roots rapidly decay, the effect is immediate.
5. It cannot be equalled for pasture. It will not only stand more close pasturing but it does not bloat sheep and cattle as do the other Clovers and Alfalfa.
6. It will give a better and greater hay crop on the majority of farms than any other crop you can raise.
7. It is much easier to secure a stand of Sweet Clover than of Alfalfa.
8. It is the most valuable green manure crop that you can grow.
9. The roots decay very rapidly after being plowed up and add a large amount of plant food to the soil.
10. Sweet Clover has more uses than probably any other Clover grown.
11. As a food for bees it has no equal. It has been grown for this purpose for a great many years, particularly in the Southern States.
12. It is gradually becoming recognized as the great American legume and is gaining recognition in all parts of the Country.
13. Sweet Clover is especially valuable to the dairy man either for hay, pasture, or as an ensilage crop.
14. There is no greater crop that can be grown for hogs or young pigs.
15. It will thrive on one-half the rainfall necessary for other legumes.
16. Sweet Clover is useful not only for reclaiming run down farms, but for new and undeveloped lands.

Why You Should Buy Your Sweet Clover Seed from the American Mutual Seed Company

We are large handlers of Sweet Clover Seed, and as we make a specialty of Sweet Clover, we are in a better position to serve you than those who do not handle as large quantities as we do. Buying in large quantities as we do, we are able to make you the lowest price, quality considered, which you can secure. Our cleaning and grading machinery is especially adapted to taking out all of the impurities in Sweet Clover, and we are therefore enabled to offer you the highest grade seed upon the market. Our buyers cover a large territory, and are on the job getting this seed together from the time that threshing begins until snow flies. Because of our being constantly in touch with the market we can offer you values which no other seedsmen can duplicate.

Our prices are absolutely right for the best quality of seed. Don't confuse them with those of dealers offering you poor, adulterated, low grade seed, and remember in ordering Sweet Clover from us that it is shipped subject to your approval, and is backed by our Absolute Guarantee, for "We Are Not Satisfied, Unless You Are."

Sweet Clover the Greatest Soil Builder Known

On account of the extreme root development of the Sweet Clover enormous quantities of plant food are added to your soil from the root system alone; and it has been estimated that about twenty tons of green manure is secured from the root system of a Sweet Clover crop. Sweet Clover is one of the greatest cover crops ever grown, as it not only prevents the soil from gulleys and washing, but it takes up large quantities of potassium and phosphorus which would leak out of the soil during the winter and stores it in the root system where it becomes deposited in the surface soil and becomes available plant food for other crops when the roots decay. You cannot afford to not sow some of this great soil builder upon your farm, for no crop rotation is complete without it, and since you can now secure Scarified Seed it makes it very easy to secure a stand, and you should at least sow a few acres this year.

Sweet Clover as a Hay Crop

Sweet Clover is rapidly coming into favor as a feed for all classes of livestock, and is especially desirable for growing under conditions where other kinds of hay cannot be grown. Sweet Clover will grow on almost any soil and under the most adverse conditions, for it resists drought better than any of the other legumes and its ability to pull through a dry spell during the first summer, enabling one to secure a stand when other

Note the Height of This Sweet Clover Plant Taken from a Field on June 18th.

legumes would be a failure is a feature that should not be overlooked. When selecting a legume to sow upon your farm this year, especially if you have been having trouble securing a stand of clover on account of the hot, dry weather after the grain crop has been removed, try Sweet Clover, for if you sow Sweet Clover, the seed of which has been scarified and inoculated, the young plants will have such a start by the time the grain crop is removed that the hot dry weather will have but little effect upon them.

Sweet Clover as a Pasture Crop

Sweet Clover makes excellent pasture for horses, sheep, cattle, and hogs, and produces the first green bite in the spring and thrives well during the midsummer drought, enabling one to keep a larger number of animals on a more limited acreage than with any other pasture crop.

There is very little danger of bloating when stock are being pastured upon Sweet Clover, and this fact makes it very desirable as a pasture crop, in fact, much better than Alfalfa.

Grangers All Satisfied.

Titusville, Pa., April 15.
I received my order all O. K. and my brother Grangers seem to be well satisfied with the quality of the seed. Thanking you for your personal interest and trusting that we may do more business next spring, I am,

ALPHA J. KERR, Pur. Agt.
Hydetown Grange.

Thinks Our Alsike and Timothy a Good Rich Mixture.

Hinckley, Ill., January 31.
I gave you an order two weeks ago and am well pleased with the seed. It's a good rich mixture of Alsike and Timothy.

GEO. W. RIMSnyder, Jr.

Tells His Friends About Our Square Dealing.

Big Rapids, Mich.
The seed I received last spring was all O. K. and that is why I am going to send again, and I have told all my friends about you and your square dealing.

BUDDIE M. VAN ALSTINE.

Four and One-Half Tons the First Cutting.

Sweet Clover

The Great Soil Renovator for Waste Land and Run-Down Farms

Probably no other crop has sprung into prominence or gained in favor as a cultivated crop so rapidly as has Sweet Clover, and it has not only become one of the most valuable hay and pasture crops, but its value for soil improvement is without an equal. Sweet Clover makes a strong, vigorous growth, and is one of the most hardy plants of the Clover family. It will make a crop for you on land where nothing else will grow.

Sow Scarified Seed

It is absolutely essential in order to secure a stand of Sweet Clover to sow Scarified Seed. Numerous experiments have shown that from 40 to 80 per cent of Sweet Clover seed will not germinate because of the seed coat being so hard that the moisture cannot penetrate it.

Professor Hughes, of the Iowa Station, has perfected a scarifying machine by means of which Sweet Clover and other legumes having hard seed coats are so treated that moisture may gain access to the embryo of the seed and cause it to germinate more readily. Our plant is equipped with one of these scarifying machines, which places us in a position to offer you nothing but Scarified Sweet Clover seed, and when you take into consideration the fact that from 40 to 80 per cent of the Sweet Clover Seed sown does not germinate, you can readily figure the advantages to be gained by sowing only our Scarified Seed. Remember, in ordering Sweet Clover seed that the American Mutual Seed Company will ship you nothing but scarified seed. The placing of this scarified seed upon the market, we believe, will completely revolutionize the farming business, for it will enable the farmer to secure stands of this wonderful crop so easily that you will find but few run down, impoverished farms, while in the case of former years the farmer has because of his inability to get a stand of the different legumes, been forced to crop his farm until it has become low in plant food.

Read what Professor Hughes, inventor of the scarifying machine and one of the greatest authorities in the world on Sweet Clover, has to say about the importance of Sowing Scarified Seed:

Mr. J. F. Summers, Chicago, Ill.

Dear Mr. Summers:—Replying to your letter of a few days since, seedsmen all over the country have long recognized the fact that much of our Clover seed did not give satisfactory germination, owing to the fact that the hard seed coat made it impossible for the seed to absorb moisture, and that as a result it was impossible for them to germinate.

Two European seed houses some years ago constructed machines for treating Clover seed in such a way as to scarify the seed coat, making possible a high germination. These machines were considered so valuable that the firms concerned have gone to considerable trouble and expense to keep the exact construction of the machine secret, in order that competitors might not be able to construct similar machines and compete with them in furnishing scarified seed.

Sweet Clover seed should never be seeded without first scarifying. Unhulled seed will seldom germinate better than 15 per cent. From 20 to 30 pounds of Sweet Clover seed are usually recommended per acre. Ten pounds of scarified seed will give a perfect stand and a number of men have reported using only 5 pounds of scarified seed per acre, and securing a satisfactory stand.

Many samples of Alfalfa seed contain a relatively high per cent of hard seed. By scarifying practically all of these seeds can be made to germinate. The harder the strain of Alfalfa (the high priced seed) the larger the per cent of seed, which, while not dead, are unable to germinate owing to the impervious nature of the seed coat.

Yours very truly,

H. D. HUGHES.

All Leading Agricultural Men Indorse Sweet Clover

Iowa Homestead Indorses All that is Claimed for Sweet Clover

J. F. Summers, Chicago, Ill.

October 22, 1915.

Dear Sir:—I am glad to learn that you are engaged in a campaign to popularize the growing of Sweet Clover. There is an important place for this crop, because so many uses can be made of it. As a soil builder it is not excelled, if equaled, by any other crop that I am familiar with. It furnishes excellent pasture, and, unlike other legumes, it never produces bloating. When cut at the right time it produces good, palatable hay, and of course it is a very heavy yielder.

I predict that Sweet Clover will be used quite extensively in the future in fitting land for Alfalfa. The same organism lives on the roots of both crops, but it is much easier to get a stand of Sweet Clover than Alfalfa, and that is why it can be used to great advantage by those who wish to grow a perennial legume like Alfalfa. I think it is an excellent thing to sow a little Sweet Clover along with Timothy and Clover, and even though it does not mature at the same time that these crops mature it is an excellent thing to have scattering plants of Sweet Clover, because the roots penetrate so deeply, and, as said before, growing this crop invariably gets the ground in good condition for Alfalfa.

Very truly yours,

JAS. ATKINSON, Editor, Homestead.

John M. Evvard, Assistant Chief in Animal Husbandry Iowa Experiment Station, Secures Some Phenomenal Results with Hogs Pastured on Sweet Clover

An acre of Sweet Clover pasture in 1910 in conjunction with an average daily grain ration of practically four pounds per 100 pounds live weight daily produced an average daily gain of 1.02 pounds on each hog. With corn at 50 cents a bushel, the gains cost \$3.70 a hundred. The returns of an acre show a net profit of \$42.07 and \$74.50, with corn at 50 cents and hogs \$5.00 and \$6.00 respectively, per hundred weight.

A bushel of corn fed to \$5.00 and \$6.00 hogs upon Sweet Clover netted, after all expenses for rental, plowing, discing, harrowing, seeding and seed were paid, 73.2 and 91 cents respectively. Assuming that a bushel of corn will produce 10 pounds of pork, and deducting the amount due to corn we find that an acre of Sweet Clover forage is estimated to produce 354.3 pounds of pork.

Successful Farming Considers Sweet Clover Very Valuable from both a Feeding and Fertilizing Standpoint

Mr. J. F. Summers.

It is difficult to understand why the many valuable points of Sweet Clover were not discovered sooner, and now that its value is conclusively demonstrated, it is equally difficult to understand why it is not much more extensively grown. Any one of its many good points are enough to recommend it.

For quantity and quality of hay and pasture, Sweet Clover ranks with Alfalfa; as a seed crop it can be made exceedingly profitable; and, for soil improvement, it heads the list.

Add to the above good points the fact that Sweet Clover can be grown upon land which will not produce Alfalfa and other Clovers successfully, and also the fact that it is exceptionally well adapted to use in a crop rotation, and you'll have to admit that it is hard to say too much in favor of Sweet Clover.

Yours very truly,

SUCCESSFUL FARMING, A. H. Snyder, Associate Editor.

A Field of Sweet Clover is the Biggest Money Making and Soil Building Crop that You Can Grow.

Varieties of Sweet Clover

White Blossom Biennial Melilotus Alba

This is the most popular and most common variety known. It is a biennial the same as Red Clover and there isn't a farm in the United States upon which it cannot be grown with profit. It meets a long felt want for a legume which will thrive on the poor soil and under adverse climatic conditions. One of the strongest recommendations in favor of Sweet Clover is that it will produce enormous quantities of succulent pasturage, and that cattle and sheep will not bloat upon it. Because of the fact that Sweet Clover can be pastured in the humid sections whether it be wet or dry, makes it more desirable than Alfalfa as a pasture crop.

The seed crop of the White Blossom makes it a very profitable crop for it not only sells for a good price, but yields extremely well. Yields of from four to eight bushels per acre are not at all uncommon.

Because of the fact that the seed of the White Blossom Sweet Clover brings a much higher price than either of the Yellow Blossom varieties, be sure that firms who quote you on cheaper seed than we are listing are supplying you with the pure and unadulterated White Blossom Sweet Clover, and also beware of seed which contains noxious weeds, for the highest quality seed is what you want when you are sowing White Blossom Sweet Clover. Because of the fact that in some sections, especially in the humid regions Sweet Clover is placed upon the market in the unhulled state, and to the fact that unless the seed and the straw contain no moisture whatever at the time of threshing, it is very hard to separate the seed from the hull, and for these reasons we handle both the hulled and unhulled Sweet Clover. See green list for prices.

Yellow Blossom Biennial Sweet Clover

This variety does not grow quite as large as the White Blossom Sweet Clover, and for that reason it is not so desirable for fertilizing purposes. It is more spreading in nature, and not as heavy a yielder. The seed is much cheaper than that of the White Blossom variety; and we can save you money if you wish to sow it. There is more of this variety of Sweet Clover being sown every year, which leads us to believe that it is becoming more popular, and although we do not recommend the sowing of it in preference to White Blossom Clover, we feel that there is considerable merit to this variety, and do not hesitate to recommend it especially for pasture and hay. Our seed is of the very finest quality and has all been scarified, and we feel sure that you will be pleased with it. See green list for prices.

Yellow Blossom Annual Sweet Clover

This variety of Sweet Clover is used almost exclusively as a fertilizing crop, being sown with small grain in the spring and plowed under in the fall. Because of its quick growing characteristics, it has become quite popular for this purpose, and is used by many for inoculating land before seeding to Alfalfa. The seed is much cheaper than the White Blossom variety and is being used quite extensively. It is also sown to some extent in the extreme Southern States where it lives through the winter. We have a very nice lot of this seed on hand which shows a high purity test, and we know that it will, if properly inoculated, meet your wants for a quick growing, hardy legume to plow under this fall. See green list for prices.

A Large Field of Soy Beans, the Greatest Soil Builder Known.

Soy Beans

No crop has increased in popularity in recent years more rapidly than the Soy Bean, and it is rapidly becoming one of the most profitable crops which can be grown throughout the corn belt. It was formerly thought that it could not be grown only in a limited territory, but the result of the numerous tests by the several State experiment stations and by the United States Department of Agriculture has proven that Soy Beans may be grown over a much greater area than was at first supposed possible.

Generally speaking, the Soy Bean requires the same temperature as corn. Soy Beans are wonderful soil improvers; they belong to the family of legumes, therefore have the power of taking nitrogen from the air and storing this most valuable of all plant foods in the nodules of its roots, thereby leaving the soil upon which they were grown in a higher state of productivity for the ensuing crop than it was before.

Soy Beans may be utilized either as a soiling crop, pasture crop, hay crop or grown for seed. As a soiling crop for cows, no crop surpasses them for producing a high yield of milk. Hogs turned into a patch of Soy Beans as the beans are commencing to form will make a phenomenal growth. The Soy Beans will produce under favorable conditions 12 to 13 tons of fresh fodder per acre, containing large amounts of crude protein and fat, which makes an excellent forage to mix in with corn fodder or some other forage plant high in carbohydrate but low in protein.

If grown for seed this crop will produce from 25 to 40 bushels per acre of the most concentrated food stuff that can be produced upon the farm, and the ground seed is equal pound for pound with oil meal in feeding value, and it is claimed that butter made from cows fed this meal has an exceedingly fine texture and flavor.

Soy Beans are used quite extensively in connection with cow peas, for when the two are grown together they support the cow pea and greatly facilitate the harvesting and curing of the crop. They are very drouth-resistant, and seem to thrive well during the hot dry weather of the summer months, and produce an abundance of succulent and nutritious feed at a time when pastures are dry and brown.

No farmer can afford to be without at least a limited acreage of this most valuable crop, for when he can produce a food stuff right on his own farm that is in every way equal if not superior to the most concentrated commercial feeding stuff upon the market, it seems like folly to pay out money for commercial feed when Soy Beans can be grown so easily.

Soy Beans the Greatest Crop You Can Grow

The growing of Soy Beans has long since passed the experimental stage. Their adaptation to all parts of the country, and their value and place in agriculture, apparently surpassing all other legumes, has been determined. Their high feeding value and their usefulness as soil improvers make them valuable additions to our list of field crops and they merit a hearty welcome from every farmer. You can surely find a few acres of your farm which you can sow to Soy Beans. You will not be disappointed in the results for they not only furnish the richest feed, but also improve your land while producing it.

This year from the standpoint of economy they are far ahead. We believe that we are the largest distributors of Northern grown soys in the country. We can at all times furnish most varieties. However, as there is an extraordinary demand this season we should like to have first and second choice when ordering.

A Few Facts on Soy Beans

1. They make one of the best protein forage feeds for cattle.
2. They build up the soil like clover and nothing beats them for a green manure crop.
3. They are not particular as to the kind of soil. They make a satisfactory growth on poor soils if inoculated.
4. Soy Beans will grow on an acid soil that will not produce clover.
5. They can be grown as far north as corn, as far south as cotton.
6. They may be planted over a period of from early spring until midsummer.
7. They will resist drought as well as any crop we know of.
8. They are the most satisfactory crop to use in a short rotation. They may be used as a whole season crop as with corn, or they may be used as a part season crop following small grain.
9. Soy Beans should be sown at the rate of from 20 to 30 pounds to the acre when drilled and 60 to 75 pounds to the acre when broadcasted.
10. They may be cut for hay any time after the pods begin to form.
11. Soy Bean hay contains more digestible nutriment and more carbohydrates than any other hay.
12. They will make from 2 to 5 tons of silage per acre.
13. Use one ton of Soy Beans to two tons of corn and it will produce the finest silage you have ever fed.
14. Soy Beans are equal, pound for pound, to oil meal in feeding value.
15. Soy Beans are especially desirable for feeding dairy cows, and a better grade of butter can be made when feeding Soy Beans than from any other feed.

Wheat is O. K.

Received the wheat and it looks O. K. Thanking you kindly for tracing it.
Lacon, Ill., April 9.
WILLIAM G. COFFMAN.

Can Sell Lots of Seed for Us.

My seed looks fine, and if they prove all right I can sell lots of seed for you if you want me to.
Vilas, N. C., May 1.
H. P. DOUGHERTY.

Asks for Samples and Prices, Wants to Order a Lot More Seed.
Alco, Ark., January 29, 1919.

In 1917 I sowed 30 acres of your seed and in 1918 got a bumper crop and was well pleased with your seed. Now my neighbor and I want to order a lot more and wish you would send us samples and your best prices on clover and grasses.
J. A. PASSMORE.

Varieties

Mammoth Yellow

This is a late maturing variety and will not mature seed north of the Ohio River. It is a very popular variety for growing, however, in the Central States, for forage and ensilage purposes. It produces a large growth of vines which makes it a very desirable variety to plow under. This variety is proving very popular for growing in Illinois and Wisconsin for ensilage purposes because of the heavy tonnage that can be grown per acre. Owing to unsettled market we are unable to quote firm prices. See list.

Medium Early Yellow

This variety is a very popular one for growing throughout the Central States, as it matures earlier than the Mammoth Yellow. It does not, however, produce as much forage, but it produces quite a heavy crop of Beans, which makes it a very desirable variety to grow. This variety is undoubtedly the most popular variety, as approximately 75% of our orders are for this variety of Soy Beans. From all sections of the country come nothing but words of praise for this popular variety. Owing to unsettled market we are unable to quote firm prices. See list.

Ito San

This is an old standard variety which is quite early and one of the best sorts grown. It is especially adapted to a Northern latitude, and a very heavy yielder of beans, but it does not produce the forage that some of the later varieties do. It matures in about 110 days. This variety has been grown in this latitude for many years and is one of the reliable varieties that always produce a crop. We are extensive handlers of this variety of Soy Beans and are always in a position to furnish you with the highest quality of seed stock. See list.

Early Brown

This variety of Early Soys is one of the most popular varieties. They can be grown successfully in any state in the Union and for those wishing a bean that will mature as far north as Minneapolis we want to recommend the Early Brown. See list.

Hollybrook

This is one of the standard varieties and will mature anywhere in the corn belt. It matures in about 120 days, growing about 36 inches tall. It is a heavy producer of seed and hay and is desirable to plant with corn for hogging down purposes. See list.

Black Ebony

These beans withstand cold, wet weather in the early stages of their growth better than the yellow beans. They have fine stems and leaves and are very desirable for hay and for silage. The yellow beans are more desirable for hogging down as the hogs cannot find the black beans. These beans are grown extensively here in Illinois and we are in a position to furnish you the very best of seed stock. Owing to unsettled market we are unable to quote firm prices. See list.

GROWING THE CROP

Soil. Soil requirements are much the same as those of corn, although Soy Beans will make a very satisfactory growth on poorer soil than will corn if the seed is properly inoculated. It is not necessary to have a well drained soil, but the water should not stand on the ground for any considerable length of time.

Preparation of Seed Bed. The ground should be well prepared so that the weeds will not be likely to choke out the young plants, and so as to facilitate the development of a good root system.

Seeding. In growing the crop for seed, one-half bushel of seed should be planted per acre. The seed should be planted in rows the same as corn, with a plant on an average of every three inches in a row. When sown broadcast or in drills a bushel to a bushel and one-half are sown per acre. Soy Beans may be planted quite early in the season, but the best results will be obtained if the seeding is postponed until the ground has become thoroughly warm. In case some of the earlier varieties are used seeding may be delayed until after some of the earlier smaller grains have been harvested, making it possible to prepare the ground and secure two crops from the same land in one year, and yet leave the land in better condition than it was before. Another practice is to drill the

Soy Beans In Corn Make the Greatest Combination You Can Grow.

Beans in between the rows after the last plowing. The best method of seeding depends upon what kind of a crop one desires to harvest.

Tillage. When the seed has been drilled in rows together or has been sown broadcast, very little cultivation is necessary. Many follow the practice of using a light harrow after seeding on land that is a little foul, as the weeds are liable to get such a start that they will interfere with the growth of the young plants. In case Soy Beans have been planted in rows on ground inclined to bake or pack, it should be stirred after each rain. Care should be taken not to work the field when the plants are wet with dew or rain.

Harvesting. The time for harvesting the Soy Bean crop will depend somewhat upon the use that is to be made of it. The chemical analysis shows that the plants cut when pods are well developed contain larger amounts of protein and fat than those cut at earlier stages, but from feeding experiments it seems that more of the plant will be eaten when cut in the earlier stages. Considering palatability and digestibility, as well as chemical composition it is probable that the best forage will be obtained just when the pods are forming. If used for soiling purposes begin cutting just as the plants are commencing to bloom. If used for hay, when the plants are in full bloom and when the pods just start to form. Soy Bean hay cut at this time is almost identical in feeding value with alfalfa, and for using in connection with corn for silage cannot be beaten. If harvested for the seed crop alone, the harvesting can be facilitated by allowing the crop to stand until most of the leaves have fallen, and sometimes this is the most desirable method. Our seed stock is of the very highest quality and has been furnished us by the very best growers in the business. We also keep on hand at all times Pure Culture Soy Bean Bacteria, which we can furnish you at a minimum cost, and will be glad to give you any further information which you may desire on growing this great soil building crop.

Appreciates Our Service.

Scobey, Mont., May 2.

I received your appreciating letter in which there was a check for \$7.29 for which I thank you very much. Your memory will be greatly appreciated.

EUGENE W. PRUTTIS.

This Crop Improves the Soil and Produces the Best of Feed.

Cow Peas

Closely allied with Soy Beans and ranking along with Clover as one of the greatest soil builders known is Cow Peas. In fact, this crop is the greatest soil renovator known. No other crop will build up a depleted soil as quickly as Cow Peas. They penetrate the subsoil when it is an impossibility to secure a stand of Clover or Alfalfa, and because of their ability to do this, have proved of great value in certain sections. Cow Peas not only gather nitrogen from the air and store it in the tubercles on its roots in the soil, thereby increasing the nitrogen content of the soil, but they bring up the potash and phosphorus from the lower stratas of soil and incorporate these elements of fertility in their plant cells where they become available for the succeeding crops. Cow Peas are without a doubt the best crop that can be grown to plow under for a green manure crop, and when used in this way, quicker results can be obtained than by any other method of crop rotation.

Cow Peas Rich in Food Value

Cow Peas are the most nutritious of feeds and can be utilized in many ways. The most common practice followed by stockmen however, is to pasture them off with hogs or cattle, cut and feed the hay or use for silage.

Cow Pea hay is a very nutritious feed and is relished by all kinds of live stock. It is very nearly identical to wheat bran in chemical composition and is one of the most valuable of roughages known for balancing the feeding ration. It is especially valuable from a milk producing standpoint.

The peas are very much relished by hogs and sheep, and being high in protein are most valuable for feeding young and growing stock. A very popular practice followed is to allow the peas to reach the ripening stage and then turn in the stock and allow them to clean them up.

Cow Peas when cut green and placed in the silo with corn greatly increase the palatability of the silage as well as increasing the feeding value, and as the two crops usually mature about the same time, they may be used in combination and produce the best silage you can secure.

Cow Peas Make a Great Crop When Grown with Corn

Cow Peas can be grown to an advantage with the corn crop, and you can secure an attachment for your planter that will drop two or three peas in each hill of corn. You can by following this practice grow two crops where only one grew before, and grow better corn than if your cow peas were not present. The best way to utilize these two crops is to cut them and put them in the silo or turn in the young pigs and lambs and they will eat the peas and you can harvest the corn crop in the usual way. We have followed the practice on our own farms, of growing cow peas with the corn, and we know of no crops that produce the revenues that these crops will when grown in this way.

A Mistaken Idea

Many have formed the idea that the cow pea is only adapted to the Southern States, and this is not the case. While the cow pea is cultivated extensively in the Southern States and

has been the means of building up and reclaiming the South from the one crop system, they are of equal value right here in the corn belt, and early maturing varieties like the New Era can be grown successfully much farther north.

Varieties of Cow Peas

WHIP-POOR-WILL. This is a medium early maturing variety which gives most excellent results. They produce a brown-speckled, medium-sized pea and are a very prolific seed yielder. When planted in corn about one bushel to the acre is usually sown, but when sown for hay from one and one-half to two bushels are used.

See price list enclosed.

NEW ERA COW PEAS. This is the earliest variety of Cow Peas grown. It matures in about 75 days. It is very easily handled by machinery, which is a strong point in recommending it to the farmer of the corn belt. It will also make a crop when sown in the stubble after small grain. They make splendid hay, and as the vines are somewhat smaller than the later varieties they are more easily cured. No farmer can afford to be without at least a few New Eras, for there is room on every farm for a few of them to be grown at a profit. No crop rotation is complete without them. The peas are somewhat small in size and you will find a bushel per acre will be ample seed. See price list enclosed.

BLACK EYE COW PEAS. This variety of Cow Peas is very much in demand at present as they are being used in large quantities for canning purposes. The plants grow in a bush shape and hold the peas off the ground quite well. These peas are used in the South by market gardeners for selling green. The seed of this variety is very short this year and if you intend sowing any we would urge upon you to place your order at once. See price list for latest quotation.

MIXED COW PEAS. A large quantity of the Cow Peas that come upon the market are mixed, and composed of different varieties, which have been grown together or have been mixed in transit or country points. These consequently do not sell for as high a price as the straight varieties of Cow Peas, but they will produce a heavy growth of forage and are invaluable for plowing under for soil improving purposes. We have quite a quantity of these on hand and are able to offer them at a very reasonable price.

GROWING THE CROP

SOIL—Cow Peas will grow and thrive on soils where other field crops would die, although they will grow better on rich soil. They produce an excessive vine in proportion to the seed. A sandy or light clay loam is considered the best for seed production.

SEEDING—The rate of seeding per acre varies according to the variety used, but the usual plan followed is a bushel for the late varieties and a bushel and one-half of the medium early, two bushels for the New Eras, and two or three bushels of the Canadian Field. They are usually put in with a grain drill and with every other spout plugged up, but are sometimes sown in wider rows with a corn planter, and given two or three cultivations, especially when grown for seed.

HARVESTING—Cow Peas should be cut for hay when most of the pods are full grown and commencing to turn. They should be cut and placed in small piles and allowed to remain in the field for four or five days until thoroughly dry. They then produce hay of finest quality.

Vetch

For soil improvement there is hardly any crop that fits in so well under all conditions as Vetch. It is a heavy carrier of root tubercles and these increase more in cold weather on Vetch than any other legume. It will grow and enrich the soil during fall, winter and early spring, and in many sections of the South it produces an enormous crop during winter months when other crops would be dormant.

Vetch will do well on poor lands where clover will fail. It needs a good seed bed with plenty of moisture to begin with, but after once established it will stand most any degree of heat, cold or drought. Like all leguminous crops, Vetch gathers nitrogen out of the air and deposits it in the tubercles on its roots. In order to carry out this process it is necessary that the seed be inoculated or the young plants will not grow as healthy and vigorous as otherwise. Although many of our customers report they are able to grow a crop without inoculating, it seems that one is taking chances when inoculating can be done easily with the pure culture method.

The Greatest Soil Builder Known

The demand for an early spring forage crop is increasing in almost every section of the United States. The Vetches are rapidly becoming popular for this purpose as the farmers are coming to know of their great value. They supply a very succulent forage from early spring until late autumn, and they will remain green under the snow all winter and furnish the first green bite in late winter and early spring, which time is always a critical period in live stock management. There is always a time during this period when the fodder and other dry forage crops do not satisfy the appetites of the farm animals. It is to bridge over this critical period that the Vetches have become such a valuable addition to the food stuffs of the live stock farmer. The Vetches are nitrogen gatherers like Clover. They are also useful because they form an early mulch in the spring and early summer, shading the ground and preventing the growth of weeds. They retard the loss of valuable plant food that is going on wherever the soil is left bare and unprotected.

We want you to know that we are enthusiastic over this crop, not because we have seed to sell, but because we believe that a more profitable system of farming can be produced by growing Vetch in the crop rotation than any other method. We only wish we might in some way place the good qualities of this crop before you so you would recognize its most extraordinary qualifications, a crop which you can sow on any kind of soil, and it will not only produce a heavy cutting of the most palatable forage known, but furnish green forage at a time when it bridges over the most critical period for the live stock farmer.

WINTER OR HAIRY VETCH. Hairy Vetch withstands winter's cold and summer's drouth. Plant at least an acre of it this season. It will not disappoint you, for it is unquestionably one of the greatest fertilizers and soil builders ever offered to the American farmer, and we believe that it is to the farmer of the Northwest what the Cow Pea has been to the farmer of the Southern States, and we know you will be well pleased with it.

PRICE—See Green List for Prices.

SPRING VETCH. Spring Vetch is a nutritious crop, and there is an ever increasing demand for it, as farmers come to realize the importance of the Vetch crop. Spring Vetch is used for much the same purpose as the Hairy Vetch, but it will not thrive on poor soil or withstand the extremes of weather so successfully. When seeded with oats a bushel of each should be sown.

See green list for lowest quotations.

Saves Twenty-five per cent on Grass Seed Bill.

Caribou, Me., April 2.

Received your grass seed last week, and I saved 25% on my grass seed bill this year. ABIL LEVASSEER, R. No. 6.

Seeds Arrive O. K.

Sharon, Conn., April 19.

Seeds arrived yesterday all O. K.

MRS. MARY R. JACKSON.

She Says, "They are Fine."

Sterling, Va., March 29.

Potatoes arrived O. K. and in good condition. "They are fine." MRS. L. F. MYERS.

Seeds All in Good Shape.

Perryman, Md., April 9.

The ten bushels of seed came in this morning in good shape. Thanks. PHILLIPS M. HALL.

Vetch—The Greatest Soil Builder of All.

Canadian Field Peas

This is a variety of peas grown all through the North, and Northwestern parts of the United States and also in Canada. They are becoming more popular each year as they have such a wide range of uses, and are so hardy that they do well on any soil adapted to oats or Spring Wheat.

It is a very popular practice to sow them with oats at the rate of two and one-half bushels of peas and two bushels of oats. By so doing a double crop can be secured. It can be threshed at one time and separated with a cleaner. Thousands and thousands of head of sheep are fattened each year throughout the irrigated sections of Idaho, Montana, Colorado and Wyoming on this crop by just turning the sheep into the field as the peas commence to ripen.

They can be grown alone for fodder purposes and green manure but for a dairy feed it is far more profitable to mix them with oats, rye or barley. The best time to cut for hay is just when the oats is heading out. This hay is of the highest quality and extremely nutritious. Cattle, horses and sheep thrive on it and it will surprise you how much of it will be produced on a small acreage.

As a fertilizer plowed under when just coming into bloom, Canadian Field Peas stand next to Red Clover. They take the much needed nitrogen out of the air and store it in their roots. This pea has a high germinating power and will germinate at a low temperature so it is well to plant them fairly deep, say four inches and then sow the oats and harrow. This will make green forage or hay to be cut in June or harvested and threshed together and used as ground feed.

This seed has become so popular the last few years that it has caused us to pay special attention to it, and this year we have a stock of exceptionally nice pure seed. It is always best with peas to know that the seed you are getting is pure and comes from good northern stock.

Do not fail to place an order early for some of this seed as we know of no other crop that we can recommend for the Northern States as Canadian Field Peas.

We know our seed will please you. Place your order early and insure getting some of the fancy stock we have. Once you start with Canadian Field Peas you will never be without them.

Timothy

Timothy leads all grasses in our Country. It is so called after Timothy Hansen who introduced it in America in 1720. As a hay crop it has long been the standard and is adapted to a wider range of conditions and is grown over a wider area than any of our cultivated grasses. In the United States it comprises three-fourths of the area devoted to tame grasses. It is grown principally in that section of the Country north of the Ohio and Potomac Rivers and east to the Missouri River, and does not thrive in the hot climate of the South and the arid regions of the West, but is quite extensively grown in the mountain valleys of the Northwest.

No other variety of the tame grasses will stand the extremes of climate or begin to compare with it in average yields or feeding value. It is a short lived perennial, heavy for its bulk and produces one of the best qualities of hay. It stools out and forms compact stools of broad leaves which give the hay its quality. It does not produce creeping stems or runners.

Value for Feeding

Timothy Hay is very palatable, easily cured and can be preserved for a long time. Timothy hay always sells for a premium on the market as it is very nourishing, being greedily eaten by cattle, and especially by horses. It leads as a horse hay. The feeding value is more or less influenced by the time of cutting. It is high in carbohydrates, but low in protein, but when mixed with some of the Clovers produces one of the very best roughages for livestock as it is very palatable, rich, free from dust, and easily digested. On average soils it is commonly sown with the Mammoth, Medium Red, or Alsike Clovers, but on lower soils nearly always with Alsike.

For pasturing it should be mixed with other grasses as close pasturing is injurious to it although it is adapted to most soils and seldom fails to make a stand on prairie soils.

Easiest and Cheapest Hay Crop

Timothy can be raised with less labor than any other hay crop. During the war when labor was scarce and many farmers were alone, Timothy was grown at a big advantage. Conditions have not changed a great deal yet and an increased number of farmers will be putting in Timothy this spring. With good farm help scarce, and at a high price, raising Timothy is a wise thing to do.

Timothy hay is made easier than any other hay and at the same time there is less waste and risk in handling it. Timothy hay cures very quickly and easily and can be put in the barn quicker than any other hay. This decreases the risk of having hay spoiled in damp weather. It is usually cut in July when it is much easier to cure than if it were cut in June, as that month averages more days of rainfall.

The time of cutting is not so exact as with other hay so that the haying season may be prolonged without causing any great material change in the quality of the hay. The hay too, may be stored longer without any material difference.

It has been found at the Missouri Experiment Station that when hay is cut just after the seed is formed, cattle will eat it in preference to earlier and later cuttings. There is not a great deal of difference in the food nutrients, as the nitrogen in the plant tends to decrease as it gets ripier. With horses, practical experiments show but little difference. With a favorable season it appears that the best time to cut hay would be in the dough stage just after the seed forms.

It takes less investment in labor and seed to put in Timothy than any other hay. Less labor is required the whole season through and the price of the seed is from a third to a fourth less than others. With labor high and other seeds high, a man can save his money by putting in Timothy. The hay, too, is always the standard and out-sells other hay on the market. It is always preferred in city trade.

This year above all others, should be a year when one will make money by raising Timothy. There are thousands of acres in our Country that are growing mainly weeds and a few native grasses. With a few cents spent in Timothy seed, dollars would be reaped.

A Field of Timothy with Heads Like This Will Produce Almost as Much Seed as a Grain Crop Will Grow.

GROWING THE CROP

Soil. Timothy grows best on moist loams and clays rich in humus. The soil should be finely pulverized as the seed, which is very small, should not be covered too deeply.

Seeding. Timothy may be sown in the fall or spring. Fall seeding is extensively practiced and the general custom is to sow Timothy on the stubble in the fall and follow with a good harrowing, or else sow it with a crop of fall wheat. The advantages of fall sown Timothy on the stubble are: Timothy does not have to contend with the weeds or the nurse crop, and it makes a much heavier growth than Timothy sown with a grain crop the next spring, and produces a good hay crop and some fall pasture the following year. The seed should be sown quite early in the fall in order that the plants may get a good start before frost. Clover is generally added in the spring when the ground is frozen and honey-combed with cracks.

Harvesting. Timothy has the highest feeding value when it is in what is known as the "second bloom" stage. At this time the seed is in a dough. If it is to be used for home consumption it should be cut at this time, but if it is to be sold to the city trade it should be allowed to ripen a little more. Timothy hay cures quickly and should not remain in the swath more than a day in good haying weather.

In many sections Timothy is cut for seed, which is most generally quite a profitable manner of handling the crop, for although Timothy seed is not usually very high in price, it is a heavy yielder, and can be harvested without much expense.

Care of Timothy Meadows. Timothy meadows require careful treatment after the removal of the hay or seed crop. Although it is not difficult to secure a stand of Timothy, it takes quite a little work to maintain the meadow in a healthy and thriving condition, and owing to the nature of the plant, having a bulb-like enlargement at the base it will stand but little pasturing, as any injury to this bulb affects the next year's growth, as this is where the plant stores its plant food. It is a coarse feeder, and should be given a top dressing of manure quite frequently, and instances have been known where this process has doubled the yield. Do not cut your Timothy too close, as the root system will withstand the drought better and there will be less danger of it killing out if you leave plenty of stubble.

Good clean seed is the foundation of a perfect meadow. Insist on pure seed. It pays. Ask for samples and prices.

We Want You to Have a Crop Like This One.

Timothy Our Specialty

We are situated in the heart of the great Timothy Seed producing section of the world, which makes it possible for us to offer you seed which no other seed firm can procure, and at a price they cannot compete with. How do we do this? Did you know there is more Timothy handled in Chicago than any other market in the United States? Did you know that we have a man who keeps in touch with all the large growers in this section and makes it a business to know where the best seed can be obtained and at the best price? That is why, friends, we are able to offer you such extraordinary values in Timothy Seed.

We are situated in the heart of the greatest Timothy producing section of the World, which has made it possible for us to become the largest dealers in Timothy Seed. There is more Timothy handled in Chicago than any other market. Located as we are in Chicago makes it possible for our men to keep in touch with all the big growers in Illinois and Iowa where the most seed is grown.

Seedsmen from all over the World come to this section for the choicest seed. We handle over a hundred cars of the purest, finest, strongest germinating, and plumpest grains of Timothy Seed that this area produces. Buying as we do in enormous quantities gives us a decided advantage over smaller firms as we can handle a million pounds as easily as many of them can handle a few hundred bushels, thus cutting the overhead expenses down to the minimum and thus saving the money on every bushel of seed you buy from us.

We have specialized in Timothy to such an extent that we have our plant especially equipped with the most modern and up-to-date machinery for handling and cleaning Timothy seed that can be found anywhere. These facts show why we are able to offer you the highest quality of Timothy Seed grown at the lowest price.

Be Sure You See Our Seed

We take great pride in being able to furnish our customers with the highest quality of Timothy Seed that can be grown at less money than inferior seed can be bought elsewhere. Better farming has created a demand for a quality of seed that is a careful selection of the very best seed grown. We have spent our very best efforts to meet this demand. Our Pinnacle Brand is the seed that meets these rigid requirements—the best seed on the market. Write today and be convinced. Do not buy any Timothy Seed until you have first seen our Pinnacle Brand.

Our choice grade is the Economy Brand. This seed is nice cleaned seed but contains more hulled seed, which does not affect the germination or purity in the least, but causes it to sell for less on the market. We can recommend this seed to our trade and know it will give good satisfaction.

All New Seed

We have built up a phenomenal business in Timothy Seed. Being located just right for this crop makes it possible for us to furnish you with seed that comes from the best fields of this year's crop. Every pound of Timothy which we have

in stock is new crop seed, and when one considers the fact that Timothy loses its vitality very quickly he should know that the seed he sows is new seed.

Do not get old seed after it has been through three or four hands, but get it direct from Timothy Headquarters where it comes from the highest producing fields, and is then re-cleaned and tested in the most up-to-date plant in America, by experts who take pride in turning out the best seed that can be procured.

The seed you sow should be absolutely clean of weed seeds and other impurities. We have men in our organization who have been cleaning seed their entire lives. It has been through their efforts in co-operation with our laboratory that the wonderful, uniformity in size, shape and weight of individual seeds in our brands have been worked out. Pure seed is the foundation of every crop. With Timothy as any other crop the selection of the seed is a matter of vital importance in getting the good thick stands we all like to see.

Remember when ordering from us the seed comes from the best fields in the world's greatest Timothy producing section. You are dealing with Timothy specialists. The seed is all cleaned by men who have given the cleaning of it a life's study. These reasons, together with the fact that we buy in enormous quantities and are able to handle a million pounds as easily as smaller firms handle a few hundred bushels, makes it possible for us to furnish you the best Timothy Seed found anywhere at the lowest price.

Real Value

There is a wide range of difference in seed qualities that make it hard for one to determine values. We want all our customers to examine our Timothy carefully till they are fully convinced that our seed is the best value. Keen and discriminating farmers know the difficulties of using questionable seed. The best seed is the cheapest. Do not take chances on poor unclean seed but try our seed that has been re-cleaned and tested till it is in every way perfect. All our seed is backed by our absolute guarantee. Look for real value in our seed. Drop us a line and get our samples. We have real values for you. Do not delay, as the market on this seed is bound to go higher.

There will be a demand for it as never before. Now is the time to buy to advantage. Order early and insure getting the best Timothy Seed to be had anywhere. We want you to have our real values.

Red Top or Herd's Grass

In the Southeastern portion of this State Red Top is grown almost exclusively. In fact, this section of Illinois is the home of this crop and more seed is produced here than anywhere else in the world. For this reason we are always in a position to furnish you the best quality of this seed at the lowest price.

Red Top is especially adapted to growing on a wet soil, having an impervious sub-soil. Because of this characteristic it is especially valuable for growing in undrained fields, as it will flourish on wet soil where no other crop will grow. It is better adapted to the heavy clay soil of Southeastern Illinois and Southwestern Kentucky than any other crop.

Especially Valuable for Pasture and Meadow Mixtures

Red Top is a very valuable grass for growing with Timothy and Clover, as it fills the lower part of the swath and fills the bottom, thereby increasing the tonnage and forming a thick, heavy sod. If you have had trouble in getting a good stand of grass on your pasture or meadow, you should not fail to sow it to Red Top. It's the crop that succeeds when all others fail. Although it is especially adapted to low, wet lands and marshes, it will grow anywhere and can always be depended upon to withstand any hardships. It is a hardy perennial and for New England conditions cannot be surpassed for the meadow or pasture.

Red Top is relished by all live stock, and when properly handled is the most palatable of hay and pasture grasses. The pasture thrives under the very closest grazing. In fact, a Red Top pasture should be kept closely cropped, as the young grass is much more palatable than if allowed to get rank. Red Top hay in order to be of the finest quality, should be cut before it gets too rank, as it is much more palatable than if allowed to ripen.

Easy to Get a Stand of Red Top

It is very easy to get a stand of Red Top, and many follow the practice of sowing this seed where it is not possible to cultivate the land. While this practice is not to be recommended, it illustrates the possibilities of this wonderful crop, and because of its ability to grow when no other crop can be grown, it has been the means of converting many waste places into productive fields. Should you be troubled with gullies, this crop cannot be beaten for stopping the wash, as it forms a thick sod that will catch and hold the soil, and because of this feature has proven a very valuable grass on many farms.

Two grades of this seed are offered for sale. The Red Top in the chaff and the Fancy or hulled seed. We handle only the Fancy or solid seed, so in comparing our prices do not confuse them with the prices of dealers who handle the inferior seed in the chaff.

Red Top sells for a very modest price, and as the seeds are very small an acreage of this crop can be seeded much cheaper than any crop we know of. The fact that Red Top can be grown on any soil and that a large acreage can be seeded so cheaply makes this crop worthy of your consideration if you have had trouble in getting a stand of grass.

Bromus Inermis

This wonderful crop is meeting with universal favor wherever grown. It is one of these crops that can be grown on any soil and under the most adverse conditions. It is especially adapted to the dry, cool sections of the Northwest. It has been the means of converting thousands of acres of barren waste into a land of beauty and profit. It withstands the adverse conditions of climate and rainfall from year to year, and to secure a stand of this luxuriant grass once is to never be without plenty of hay and pasture. This is the crop that never fails, and as you are growing grasses under dry land conditions, you should certainly not be without this wonderful crop.

Bromus High in Feeding Value and a Heavy Yields

Bromus is very high in feeding value, as it contains a high per cent of protein, ash and fat, the most necessary constituents in animal feeding stuffs. The quality of the hay and pasture is good, and no grass can be grown that is more relished by all kinds of stock.

Bromus is a very heavy producer and produces an abundance of the very finest hay and pasture. It is especially desirable for growing in those sections where Clover and Timothy do not thrive, and it has been the means of producing thousands of tons of valuable feed upon otherwise unprofitable land. This crop is no experiment. It has passed the experimental stage and you can make no mistake in proving it. It is a success from every standpoint. It is recommended by the highest authorities and we feel certain that you will be pleased with the results you secure from this crop. Our seed stock comes from a reliable source, and as we handle this seed in quite large quantities, we are able to make you a much lower price than other dealers.

Price—See price list, and remember bags are free.

Red Top or Herd's Grass.

Orchard Grass

This grass is particularly adapted to those sections lying east of the Missouri and Arkansas Rivers. Wherever it has been given a fair trial it has been placed in the front rank of grasses for permanent pasture. It is a rank, deep rooted perennial and it does not form true sod, as it grows in bunches. It starts very early in the spring and keeps on growing during the hot summer months. It furnishes an enormous amount of green foliage which is very palatable and nutritious. Compared with timothy, it is about 50 per cent richer in protein and ash. It is adapted to a wider range of soils than most any other grass. It grows faster. It resists drought better than timothy or blue grass. It grows well in the shade. This characteristic and the fact that it does not produce a sod have made it very desirable for growing in orchards where cultivation is not practiced.

Price—See price list, and remember bags are free.

We are very large dealers in Orchard Grass seed and because of this fact can always save you money on this seed. Our seed stock is grown by the most reliable growers and you will always find our seed high in germination and purity.

Have You Included Sweet Clover in Your Order?

If you have not included any Sweet Clover in your order this year, by all means do so. The seed is much cheaper than red clover and it is the cheapest means of building up your farm. Don't overlook the advantages of growing it, for it certainly is one of the greatest crops that you could grow. We are the largest handlers of this seed east of the Mississippi River and are in a position to save you money. If you are not growing this great crop by all means start doing so at once. It will produce you the finest pasture you have ever grown. The hay crop you secure will be the most nutritious you have ever grown. It will build up your farm faster than any crop you can grow on it. You can't beat Sweet Clover. Better try it.

See Green List enclosed. If you are not getting our Monthly Price List, write us. It will save you money.

Perennial Grasses

KENTUCKY BLUE GRASS. With the prices of land advancing as it is at the present time, we must make our pastures better and better in order to produce the maximum amount of pork, beef and mutton on a given acre. No other grass will prove as valuable for establishing a permanent pasture as Kentucky Blue Grass. It is the king of grasses. It stands head and shoulders above them all when it comes to a permanent pasture. No stock farm can afford to be without a Blue Grass pasture. That is the source of a permanent income. It is not only the most palatable of the pasture grasses, but it is the most nutritious and is richer in protein and ether extract than any other grass. The seed we are offering you is strictly reliable in every respect. It has been carefully handled to maintain its germinating qualities, and we are making you a price below what many are asking for inferior seed stock. Send for samples.

Extra Fancy Kentucky Blue Grass. This grade of seed weighs from 21 to 23 pounds to the measured bushel. It is extra fancy new crop seed, and we guarantee its germination. Price: 5 lbs. or more, 30c per lb. Ask for prices on bushel lots or more.

Fancy Kentucky Blue Grass. This is an extra quality of Blue Grass Seed, and although not quite as bright and heavy as our Extra Fancy grade, it is all first-class, new crop seed, and we guarantee the germination. Price: 5 lbs. or more, 25c per lb. Ask for prices on larger amounts.

ENGLISH BLUE GRASS, or Meadow Fescue. Meadow Fescue is a perennial, attaining the height of from three to four feet, containing fine large leaves. It has been cultivated quite extensively in the Eastern States and is coming into favor in the Northern States and Canada. It is used to an advantage in blending permanent pasture and meadow mixtures, and it grows very rapidly and on wet and moist lands, hence one can keep down other grasses. It will stand lots of close pasturing by stock, and while it does not produce the tonnage per acre that Timothy does for hay, is much more permanent and more palatable to the livestock.

Price—5 lbs. or more, 25c per lb. See price list on bu. lots.

ITALIAN RYE GRASS. This variety of Rye Grass is an annual. It is used quite extensively for seeding in pastures where clover and timothy have died out. It is grown quite extensively on the Pacific Coast and many places in the southern part of the United States. Italian Rye Grass, while an annual, re-seeds itself very rapidly, by allowing the hay to stand until quite ripe before cutting, which injures the quality of the hay very little. Sow about twenty-four pounds of seed per acre.

Price—5 lbs. or more, 18c per lb.; 100 lbs. or more, 16c per lb. Ask for prices on larger amounts.

CANADIAN BLUE GRASS. This variety of Blue Grass closely resembles Kentucky Blue Grass in appearance. It grows much taller, however, and is more inclined to grow in tufts or bunches than to form a universal sod. It should be sown at the rate of about 30 lbs. to the acre.

Price—5 lbs. or more, 18c per lb. See list for prices on bushel lots.

ENGLISH RYE GRASS. This grass was the first grass grown under domestication. Its seed was the first to be placed upon the market as a seed of distinct variety. This grass is a very important crop in Europe and forms the base of the pasture mixture of some of the finest meadows in the land. It seems to be especially adapted to pasturing and will stand a great amount of close cropping and trampling. It will grow upon any soil in the Corn Belt, and for use in the permanent pasture mixture should be found very valuable. Sow about twenty-four pounds of seed per acre.

Price—5 lbs. or more, 20c per lb. Ask for prices on larger amounts.

TALL MEADOW OAT GRASS. This grass is particularly adapted to warm, dry climates, where Timothy will not grow. It is quite productive, stands pasturing well and remains green until quite late. It forms a very valuable mixture with Orchard Grass and Red Clover. It may be sown in the spring at the rate of two to two and a half bushels per acre, or when sown with Orchard Grass and Red Clover blended proportionately.

Price—Postpaid, 1 lb., 35c. Your expense, freight or express, 3 lbs., 65c. See price list on bushel lots.

A Mixture of Perennial Grasses Makes a Wonderful Crop.

BERMUDA GRASS. This is the greatest pasture grass of the South. It is a low growing, fine leaved perennial grass, with vigorous, creeping stems. It is never injured by the closest pasturing or frequent cuttings, and forms the foundation of all perennial pastures of the South. It is very high in feeding value and very palatable to all kinds of stock. It is distinctly a sub-tropical crop and flourishes under the hot rays of the southern sun.

Price—75c per lb., postpaid. Your expense, 5 lbs. or more, 50c per lb.

GROWING THE CROP

SOIL—Most of the perennial grasses prefer a rich limestone soil and a rather moist cool climate.

SEEDING AND TILLAGE—Several methods are practiced in starting the perennial grasses. They may be sown with Clover and Timothy where these crops succeed well or sown in late summer or early fall in the corn field or on a light snow in the winter when the ground is slightly frozen and honey-combed with cracks. Most of these crops should be sown at the rate of about 14 lbs. of seed per acre but the amount of seed sown depends a great deal upon the conditions under which it is sown.

HARVESTING—All grasses of the Blue Grass family are primarily pasture crops and are very seldom harvested for hay. While the hay is very nutritious it is not usually palatable and is very hard to cure. The other perennial grasses are often harvested for hay and are handled much in the same way as other hay crops, but we think that by far the larger percentage of these are grown for pasture as their hardy nature enables them to withstand close grazing and makes them especially suitable for this purpose. Much of the seed is often adulterated and you should always secure your seed from reliable sources to insure its purity.

Alsyke and Timothy Mixed

Alsyke and Timothy being both perennials are especially suited to be grown together; both are partial to moist, low lands and ripen at the same time, producing one of the greatest hay and pasture crops known.

Why We Can Sell This Seed So Cheap

In some sections of the country great quantities of Timothy and Alsyke are harvested together for seed, and as the seeds of the two are nearly of the same size, shape and weight, it is impossible to separate them in the cleaning and grading process, and because of this fact we are able to buy these seeds when mixed at a much less price than we could buy them separate and mix them. Hence, we are able to offer you Seed of the combination of two of the greatest Pasture and Hay Crop Plants at a price which will save you from one-third to one-half the cost of your seed. The seed as we buy it in the country is in about the right proportion for seeding, and taken all in all, I believe that we are in this mixture offering you the greatest value in grass seed that you will ever be able to secure for the money. We know that it will please you, for there are hundreds and hundreds of men throughout this section who would sow nothing else. It certainly does produce a wonderful hay and pasture crop, as the Alsyke added to the Timothy forms a thick bottom, greatly increasing the yield and adding to the palatability and feeding value of the crop.

These Crops Especially Adapted for Growing Together

Alsyke and Timothy when grown together greatly aid one another, the Alsyke being a legume supplies nitrogen to the soil, thereby greatly promoting the growth of the Timothy. The Timothy supports the Alsyke, enabling it to make its best and most rapid growth, and acts as a protection to it during the winter, preventing it from winter-killing. Thus, you will find these two plants reaching their maximum production when grown together. Alsyke and Timothy mixed is one of the greatest crops for reclaiming wet lands which have been recently drained, and thousands of acres of it are being sown in sections where the construction of drainage canals have made it possible to reclaim land which was formerly nothing but swamp land, which when newly drained is usually sour and quite often contains a greater or less amount of alkali, making it impossible to produce profitable grain crops upon it. Alsyke and Timothy seem to thrive particularly well upon this kind of land, and much greater returns can be obtained from growing this crop on this kind of land than any other crop.

Another most important feature to take into consideration in regard to Timothy and Alsyke is the fact that they are both perennials, and you do not have to be re-seeding them every year or every two years, but when you sow them obtain a permanent meadow or pasture which will be there until you want to break it up. This fact should not be lost sight of when ordering the seed for your meadow or pasture, for it is not always convenient to have to break up a meadow or pasture every two years, as you have to do when using some of the other Clovers; we do not believe you could do better than to use Timothy and Alsyke for seeding any land which you may want to sow. Timothy and Alsyke will thrive on any land located anywhere within the clover belt, for although this crop reaches its highest state of perfection on moist, low land, it can be grown anywhere with good results.

Alsyke and Timothy the Greatest Feed You Can Grow

Alsyke and Timothy hay is becoming recognized as one of the most desirable hays upon the market, for as the teamsters and horsemen in the cities are becoming educated to its high feeding value, it is bringing a premium over any other mixed hay. Alsyke and Timothy Hay is much more easily cured than is the hay of Clover and Timothy, for the stems are smaller and when mixed with the Timothy hay seem to dry out readily and still retain their color and leaves, producing one of the most palatable and nutritious hays which one can find for any and all kinds of stock.

We are very enthusiastic over these two great crops when grown in combination, for we believe in them the wide-awake, progressive farmer will find a crop which will be of material use to him, and one which will not only be the means of his securing a big revenue from land which was formerly waste, but one which will enable him to sow a larger acreage at a small cost than it would otherwise be possible for him to do.

Think of it, these two great crops being sown in mixture at almost a Timothy seed price. While, if you purchase them alone you would pay from \$20.00 to \$25.00 a bushel for the Alsyke, and be able to buy the Timothy but little cheaper than we can sell you the two mixed.

This mixture is a valuable addition to make your permanent pasture, for reseeding places where the wash has covered up the other grass, or in draws, sloughs, or seepy places.

Try this great pasture and meadow mixture and be convinced of its many good qualities.

Price—See green list for latest quotations.

Clover, Alsyke and Timothy Mixed

In order to meet the demands of our customers for a mixture to sow for pastures and meadows, we have mixed our Alsyke and Timothy and our Clover and Timothy, enabling us to offer you these seeds in mixture all ready for sowing. This seed is of the same quality as the Clover and Timothy mixed and the Alsyke and Timothy mixed, and these three when sown in combination will furnish you with one of the most desirable meadow and pasture mixtures which you can secure, and at the same time save you an enormous amount of money in your seed purchase, for buying as we do in such large quantities and direct from the grower, we are enabled to furnish you more seed for the money than anyone else can do.

Advantages of Sowing Clover, Alsyke and Timothy Mixed

Many advantages are to be gained by the sowing of Clover, Alsyke and Timothy in mixture, first among which may be mentioned the excellent quality of hay produced. The hay resulting from the blending of these three great crops is without question the most palatable and nutritious hay which can be grown. The yield of hay grown by combining these crops exceeds that of any of them when grown alone, as the Clover not only fills the bottom of the swath but it stimulates the growth of the Timothy. A meadow or pasture resulting from the sowing of Clover, Alsyke and Timothy is more permanent than Clover and Timothy alone, as Alsyke, like Timothy, is a perennial, and even after the Clover has outlived its usefulness you still have a meadow or pasture that will endure for years.

When grown on poor land the humus necessary to produce a bumper crop is placed there by the Clover and Alsyke thus leaving the land in better shape than before this crop was grown. There is no extra work in mixing this seed after you receive it as it is already mixed uniformly as nature grew it, and ready for the seeder, thus eliminating a lot of work in measuring and mixing. It is also much cheaper when bought this way.

All Clover, Alsyke and Timothy Backed by Our Absolute Guarantee

Remember, we sell you our mixed Clover, Alsyke and Timothy under the same guarantee as any other seed, and if you are not perfectly satisfied with it after you have tested it in any way you like, send it back to us and we will refund your money and whatever freight you have paid. For if you are not satisfied we are not, and we do not want a single dissatisfied customer.

Red Clover and Timothy Mixed

Red Clover and Timothy make an excellent combination when sown together, and to meet the demands of our customers who wish to secure Red Clover and Timothy already mixed, we have retained quite a quantity of seed as it came from the grower and as the seed was mostly all bought on a Timothy basis, we have some bargains to offer you in Timothy and Clover mixed.

Many Advantages to be Gained by Growing Clover and Timothy Mixed

Timothy and Clover produce a better quality of hay when sown together than either produces when grown alone, and the hay is much easier handled when grown in combination. Clover hay especially is quite hard to cure when grown alone, but when grown in combination with Timothy it dries out more readily and goes into the stack or barn in better condition.

Timothy also acts as a support for Clover during the growing period. When the two are grown together, Clover and Timothy will make a much heavier crop of hay than either grown alone, as the Clover fills the bottom of the swath, leaving no waste room between the plants. The Clover being a legume gathers the nitrogen from the air, storing it in the nodules on its roots, when this most necessary plant food for the production of a Timothy crop becomes available for the Timothy. Thus we have Timothy reaching a higher state of production where grown in combination with Clover than grown alone.

Why Pay Two Prices for Clover and Timothy When You Can Secure it Direct from Us

We have no retail merchants to protect. We sell direct to you on a wholesale basis. Get our prices on Clover and Timothy and be convinced of the exceptional values we are offering you. While we have quite a large stock of mixed Clover and Timothy on hand, we expect a big demand for this seed this spring, and when our stock is exhausted we cannot replace it at the present prices.

Timothy and Clover when bought separate command very high prices, and the tendency is for prices to get higher as the years go by. The reason for this is that there is an ever-increasing tendency among farmers to grow these crops in combination, as shown by the great number of orders which we receive for mixed seed, leaving a smaller acreage each year which can be harvested as straight Clover or straight Timothy. These facts, we believe, fully demonstrate the fact why we can offer you mixed Clover and Timothy so much cheaper than we can Clover or Timothy in straight lots. Price—See price list.

Our American Blend Permanent Pasture Mixtures Produce Mutton without Other Feed.

Permanent Pasture and Meadow Mixtures

Our American Blend

To meet the demands for grass seed which will produce a meadow or pasture that will furnish the greatest amount of forage and at the same time produce a crop that will make a continuous growth throughout the season and meet various conditions of soil, climate, etc., we are offering you our special pasture mixtures which will fulfill these requirements. Some grasses are particularly adapted to wet low grounds, where there is plenty of moisture, others to dry cool climate of high altitude, and still others flourish in the dry, oppressive heat of the far South. To meet the requirements for pasture and meadow mixtures, adapted to different conditions, we are offering you our American Blend Mixtures, which are the result of many years experience in handling pastures and meadows which have proven conclusively that a mixture of grass makes a better meadow and produces a better permanent pasture than the growing of one crop exclusively.

Composition of Our American Blend Mixtures

Nothing but first-class seed is used in the making of our American Blend Mixtures, all of which has been carefully re-cleaned and is of a high grade which should give the best returns. These mixtures are made from the following list of seeds of well known varieties: Alfalfa, Blue Grass, Timothy, Red and Mammoth Clover, Alsike, Red Top, Orchard Grass, Meadow Fescue, Tall Meadow Grass, English Rye Grass, Italian Rye Grass, Bromus Inermis, and Creeping Bent Grass. Our recommendations for quantity to seed per acre in the following combination is fixed on the basis of a good fair seeding, and can be varied to suit the needs of each particular individual.

Our American Blend Mixtures for Permanent Meadows

This mixture has been formulated with the idea in view of producing the greatest tonnage of palatable, nutritious, high grade hay upon a particular kind of soil and under certain climatic conditions. Those grasses have been selected which will produce the most vigorous growth in the shortest time and produce hay of superior quality. Grasses are selected which will ripen at the same time so that a uniform cutting can be secured.

By producing a blend which will meet these different requirements, we believe we are offering you one of the greatest crops which can be grown, for we do not believe that any one crop will produce the well-balanced results year after year, as will our Permanent Meadow Mixture, for the longer it stands the better it gets, and it will come through extremes of weather conditions which would prove disastrous to most crops that are grown alone.

No farm can afford to be without the permanent meadow. It is the advance guard of intensive farming and as our farms increase in value, we must grow these crops which will give us the maximum production.

	100 lbs.	50 lbs.	25 lbs.	5 lbs.
	per lb.	per lb.	per lb.	per lb.
1. For moist ground, rich soil.....	\$0.15	\$0.15½	\$0.16	\$0.18
2. For dry, high ground, strong soil.....	.15	.15½	.16	.18
3. For dry, high ground, light soil.....	.15	.15½	.16	.18
4. For marshes, swamps, overflow land....	.15	.15½	.16	.18

Our American Blend Mixtures for Permanent Pastures

This pasture mixture has been blended with not only the idea in view of furnishing those grasses adapted particularly to soils and climate, but it has also been blended with the idea in view of producing a pasture which would improve in quality as the years go by and furnish the greatest amount of feed over the greatest length of time. These grasses will furnish pasture throughout the entire grazing season, and owing to the deep rooting and spreading character of many of the varieties used in blending this mixture, fields will always look fresh and green.

We recommend the sowing of twenty-five pounds per acre.

	100 lbs.	50 lbs.	25 lbs.	5 lbs.
	per lb.	per lb.	per lb.	per lb.
1. For moist ground, rich soil.....	\$0.15	\$0.15½	\$0.16	\$0.18
2. For dry, high ground, strong soil.....	.15	.15½	.16	.18
3. For dry, high ground, light soil.....	.15	.15½	.16	.18
4. For marshes, swamps, overflow land....	.15	.15½	.16	.18

Lawn Grass Mixtures

"The home is the greatest of all institutions." Then keep it beautiful. Nothing gives bigger returns for the money than a beautiful, velvety, well kept lawn, for there is nothing that will add to the satisfaction of the dwellers as much as will a beautiful lawn.

Sowing seed is a much more satisfactory way to secure a nice lawn than by the use of turf (sod). If you are careful to secure from a firm of reputable reliable seeds of low-growing, tenacious sorts, it will save you much trouble in the end.

We offer you in our American Lawn Grass Mixture the finest ever-green grasses, mixed in such proportions that they will produce a healthy, compact beautiful sod in a very short time. Price, postpaid: 1 lb., 50c; 2 lbs., 90c; 5 lbs., \$2.00.

American Southern Mixture

Made up of grasses especially adapted to a Southern climate, and so blended that they will produce a beautiful green lawn throughout the entire season. Price, postpaid, 1 lb., 50c; 2 lbs., 90c; 5 lbs., \$2.00.

American Terrace Mixture

Specially adapted to keep the terrace and sloping places looking nice. The grasses in this mixture are of such a nature that they will prevent washing and hold the soil. Price, postpaid: 1 lb., 50c; 2 lbs., 90c; 5 lbs., \$2.00.

American Shady Lawn Mixture

This mixture has been blended with the idea at all times in view of producing a lawn in those places shaded by trees or buildings to such an extent that other grasses would not grow. We have therefore made up this mixture from those grasses that grow naturally in the woods. Price, postpaid: 1 lb., 50c; 2 lbs., 90c; 5 lbs., \$2.00.

Cyclone Seeder

A great labor and seed saving invention. The working principles are a marvel of simplicity in construction and perfect in operation; even a boy can work it. It will sow all kinds of small grain or seeds evenly and any desired amount per acre, and from 30 to 60 acres per day. Instructions with every machine. The manufacturer has had 25 years' experience in making sowers, and has a very high reputation for skill. We make our prices so low in order to give every farmer who reads our catalogue an opportunity to procure one of these most valuable seeders.

This seeder is guaranteed to do satisfactory work and you will be pleased with it.

PRICE—Parcels Post, prepaid, \$2.00.

Gold Mine Pork Producer.

Gold Mine Pork Producer

There is an ever increasing demand for a mixture that will produce a big crop of succulent feed and at the same time build up the soil. This demand is met in every way by this great combination and at a cost of less money than any crop that could possibly be used. It will produce more pounds of pork for less money than any other crop and at the same time build up the soil.

Why the Price is so Low

There are countless times during the year that we have opportunities to buy mixed clovers at a greatly reduced price, much cheaper than we could buy them separate. Many times clovers are grown in combination, many times they are mixed in elevators, and often they are mixed in shipping. There is practically every possible combination of clovers mixed every year, either by accident, or by being grown and threshed together. Red Clover with Alsike and Alfalfa with Sweet Clover are grown mixed, and threshed for seed in many localities. Red Clover and Crimson Clover are often grown together and sometimes Alfalfa is grown and threshed with Red Clover. Seed of mixtures can be bought to a better advantage than when separate. The average small dealer does not recognize the value of many lots of mixtures of seed and consequently we are able to buy and sell them at exceptionally low prices. Being located in the greatest terminal market in the world makes it possible for us to secure some wonderful bargains for you.

Money Making Pastures

We have paid especial attention to these mixtures not only in buying them but in studying their values for pasture purposes and find they are just what is needed to fill the ever increasing demand for a pasture that will produce pork at a minimum price and at the same time build up the land. We find that in this all the necessary bone and muscle building materials for young pigs are produced. It has long been proven that the cheapest way to produce pork is by means of a good pasture. If you do not have a good Alfalfa or Sweet Clover pasture on your farm, put in a pasture of this mixture by all means. It will make you more money in raising hogs than anything you can do. The larger the farm the more you should sow. When you see young pigs up to their backs in this Clover it surely will bring to your mind all the advantages of a good pasture. They require little or no grain and will make gains faster than any other way that they can be handled. In times like this it is a wonderful money maker. To be able to pasture more hogs, than the same acre has ever done before is the mission that this mixture fulfills. Start using it, increase your pork production, save on your grain crops, build up your farm and make more money.

A Soil Builder

We have found that in growing this mixture all the good effects of the legumes are gotten and many of the individual benefits of each member of the combination are derived. One variety will stand more hardships than the others, another will stand more drouth, another more acid soil and another poorer soil. Some of them reach down to greater depths in

the soil with their roots thus opening it up and making it easier for the others. This makes it possible for this mixture to build up a rundown farm and put it on a paying basis faster than any other crop can do.

A Rich Hay Crop

This combination makes a better hay than can be gotten by any one crop. It gives a variety that is relished by all classes of livestock. The hay, too, is of better quality and we have not heard of a case where cattle would bloat on it.

In this mixture you are offered the best values of the year for a crop that will not only make you money in pasture and hay, but will build up your farm at the same time. We feel there is a place for it on every farm.

Since we must depend upon mixed lots of seeds that have either become mixed in the field or in shipping, we are unable to quote you firm prices, but our monthly price lists will make you special prices on these special lots.

Billion Dollar Grass

There has been such a call for Billion Dollar Grass since the farmers have been giving more attention to better forage, that we are going to tell you more about this forage, often known as Japanese Millet. No doubt the best way to describe this wonderful crop is to quote what leading agricultural authorities have to say about it.

Professor Williams of the United States Department of Agriculture says: "Already widely grown as a hay crop, it deserves more general use for soiling as this Grass is of particular value for feeding to dairy cattle, young stock and sheep. The Billion Dollar Grass (*Panicum Crusgalli*) in many sections of the country can be made a supplement for pasture in such a way as to allow a material increase in the number of stock that can be kept on the farm. On account of the large yield of any good quality of forage, it is most excellent for silo use, as frequently a good crop can be raised under conditions which would not admit the growing of corn for ensilage. The Billion Dollar Grass, if compared with seed and forage, will run ahead of Timothy. The seed contains almost as much fat and extract matter as shelled corn and a little more protein."

Every Class of Live Stock Relishes It

Every class of live stock from horses to poultry relish and make gains on Billion Dollar Grass. Cows will prefer it to corn. When used for silage an ideal balanced ration for milch cows can be had by mixing two parts Billion Dollar Grass and one part Soja Beans when filling the silo. This mixture requires no other grain, oil meal or other feeds as supplements, but will make a feed that will increase milk production.

A Great Hay Crop

Billion Dollar Grass is not only a wonderful crop for the silo, but will produce fine leafy hay anywhere in but six to ten weeks time. If sown the first of May it will be ready to cut the middle of July. The warmth and richness of the soil will determine the height which varies from five to eight feet. It has been known to produce 12,000 pounds of hay per acre at the Massachusetts Experiment Station, and 50,000 pounds of rich green fodder.

Northern Grown Seed Oats

Change Your Seed

Unless you change your seed oats at least every other year you cannot expect a bumper crop. No other grain crop will pay the dividends on the money invested for good seed that the Oat crop will. All experts on this great crop agree that it is an absolute necessity to import Northern Grown Seed Oats in the great Corn Belt, and place Northern Grown Seed above all other requirements in the production of a successful Oat crop.

Why Our Seed Oats Are the Best

We are Field Seed Specialists and put forth all of our energy and time in developing, breeding and growing these varieties which have shown by actual field tests that they are superior to any others. We make a specialty of Seed Oats, and we grow them in Canada and the Northwestern States where we can produce seed superior to that which can be produced in any other part of the world, for in no other country does the oat plant reach such a state of perfection that it does in the Northwest. Where our seed is grown it has shown by actual field tests to produce seed superior to any other territory, not only for high yielding qualities, but for their ability to resist adverse weather conditions as well.

Improve This Golden Opportunity

Leave no stone unturned to get your share of this great harvest. Don't for the sake of a few paltry dollars sow seed of poor quality when you can buy seed that will produce from 20 to 40 bushels more per acre than you have been growing if you have not been sowing Northern Grown Seed. No crop deteriorates so quickly as Seed Oats and the small cost of seed is a trivial matter compared to the results obtained, and with the high prices that are sure to prevail you cannot afford to not put forth every effort to secure good seed.

Our Seed Has Been Carefully Recleaned

Our cleaning machinery is of the most improved type, and not only removes all of the dirt and weed seed, but all of the light and inferior kernels as well, so that instead of having seed oats which germinates from 50 to 60 per cent you receive oats which will germinate nearly 100 per cent, and each kernel plump and strong, insuring you a stand of healthy vigorous oats, that will make you 100 per cent on what you invested in seed.

We make a specialty of the Green Mountain favorite, Re-Generated Swedish Select, the New Alberta, Northwestern Grown Swedish Select, Kherson, Improved Silver Mine, Golden Rust Proof, Sixty Day Oat, Iowa 103 and Iowa 105. These varieties have all shown by actual field tests to be the leaders, and although we have at present a couple of new varieties under consideration which have for two years shown some very phenomenal tests, yet they have not proven by actual field tests that they will meet the exacting requirements which we demand of our Seed Oats before offering them to you.

The Oat Crop Ranks Third in Value of Cereals

The original home of the Oat was thought to be in Central and Western Europe and Eastern Asia. Oats being adapted to the cold, moist climates of the North, became the favorite food of the hardiest people in Northern Europe, and today forms the daily breakfast food of millions in the United States. The regions of the greatest oat production are Canada, Norway, Sweden and Northern Prussia.

The oat grain as a whole is found to contain a larger amount of crude fibre and ash than any other cereal, and it is of very high value as horse feed as it has certain stimulating qualities which make it very valuable for driving horses. It is a very valuable feed for young and growing stock, as it contains lots of bone and muscle building elements. The straw from the oat plant leads that of all other cereals in feeding value, and the oat plant if cut at the proper time produces a very nutritious hay.

Sheaf—See Height.

Green Mountain Favorite—The Best of All.

New Alberta—Note the Large Sized Kernels, Thin Hull, All Meat.

The Heavy Yielding Varieties Adapted to Eastern Conditions

We conscientiously believe that we are offering the Eastern farmer in the Green Mountain Favorite and the New Alberta, the best varieties of Seed Oats that can be grown. The large stiff straw that supports the heavily laden heads of these varieties enables them to withstand adverse climatic conditions that no other varieties will withstand.

These are the vigorous growing Oats of the oat family. They are the varieties that will succeed where no other oats will grow. Our Seed stock of these varieties has been especially grown for us by the leading growers in the business and we cannot recommend it too highly to you. We feel that if you start growing these oats that it will mean the doubling of your oat crop. This is the year of all years to use the very best of seed that you can secure. Oats are sure to be high another year and you should certainly put forth every effort to produce every bushel possible upon each acre.

The American farmer is today practically supplying the world markets with foodstuffs and as this crop is the principal foodstuff not only for live stock but for the human race as well, there is sure to be a world wide demand the coming year for this great cereal. The seed stock we are offering you of these high yielding varieties, we believe, is the best lot of seed oats that ever came out of the Northwest, and we feel sure that they will be the means of greatly increasing your yield. This seed will make you money on your new oat crop.

Green Mountain Favorite Oats

This oat has become a universal favorite among some of the largest growers in the Central States. It has made some phenomenal yields here in the corn belt, and we feel that you will be greatly pleased with the high quality which we are offering you in this variety. We have grown this oat very successfully upon our own farm. Therefore we are in a position to know just what this wonderful variety will do for our customers, and when we tell you that we believe we have in this variety an oat which will completely revolutionize the small grain growing industry of the Eastern States we are not basing our opinion upon the results obtained by other growers, but upon our own success.

Making Money Introducing This Variety in Your Locality

We know of no other way by which a progressive, up-to-date farmer can make more clear money than by introducing these oats into his neighborhood. Your neighbors will come for miles to secure the seed of this variety when they once see them growing. We know of one farmer in Southern Iowa who sowed thirty acres of the Green Mountain Favorite in a field along the main traveled road which went by his farm. Before these oats headed out they were the topic of conversation of everyone who passed by the field, and because of their strong, vigorous growth and dark, healthy color, there were diverse opinions expressed as to just what this crop might be. Well, when the crop commenced to head out there were sure some sensational comments made as to how much they would yield per acre. We had the pleasure of visiting this field when they were about half through harvesting this crop and we think we can safely say that the afternoon we were there, there were thirty-five or forty men who came into the field to admire this enormous crop. When the crop was threshed the tally box on the thresher registered twenty-eight hundred bushels, or a little better than ninety-three bushels per acre, and when pulled over the scales they weighed out fifteen bushels more per hundred, making a yield by weight of one hundred and eight bushels per acre. The following spring these oats were sold for seed to neighbors in that locality for \$1.00 per bu.

Green Mountain Favorite Superior to Other Varieties

The Green Mountain Favorite is a very vigorous grower, making it smut, blight and rust resistant. The grains are large and pure white in color, with a very thin hull, commanding the highest market price, as they are well suited to the manufacture of oat meal and are of high food value. The heads are long, bushy, and always heavily loaded with grain, giving a field at harvest time the appearance of being a solid mass of grain. The straw is very stiff and of fine texture, and it will stand up extremely well in all kinds of soil, and it will not kink over like other varieties if allowed to stand a few days after ripening. This variety is a very persistent stooler and it is not necessary to use as much seed per acre as in the case of other varieties. The young plants are very hardy, enabling one to sow their oats quite early in the spring. The plants make a very uniform growth and the grain ripens very uniformly, and this characteristic, together with its ability to withstand adverse weather conditions at harvesting time, makes the Green Mountain Favorite a very desirable variety from a harvesting standpoint.

Our seed stock has been developed under our direct supervision, and tests from 42 to 45 lbs. to the measured bushel. Our seed is free from smut, and we believe that we are offering you in the seed of this variety the highest quality of seed oats ever placed before the American farmer.

PRICE—See green list for prices.

New Alberta

This new variety of Oats has proven to be a real wonder, for it seems especially adapted to all kinds of soil and climate in the grain growing belt of the United States. This variety is being almost universally adopted by all of the leading Oat growers in Canada and all of the Northwestern States, as it is a very heavy yielder, not liable to lodge or rust and the large plump kernels weighing from 45 to 50 pounds per bushel demands the highest price upon the markets of the Northwest. Our seed stock of this variety of seed Oats has been carefully tested and found to be a wonderful producer; it has been grown in all sections of the country, and has been found to be extremely well adapted to the corn belt.

Start a Seed Plot

At least secure enough seed of this most wonderful variety to sow a seed plot this year, for no corn belt farmer can afford not to grow some of these most wonderful oats upon his farm. Some may think us over enthusiastic in regard to this most excellent variety, but we wish to say to you that we have seen some fields of these Oats which have proven to us that we cannot make any statement too strong regarding the big yields and fine qualities of this variety, and we conscientiously believe that when we are urging you to at least secure enough seed to produce seed stock for your entire farm another year that we are doing you a favor. We know these Oats, we know what they have done for other farmers, and we know what they will do for you, and we do not feel we can make any statement too strong in regard to them.

Reasons Why You Should Sow the New Alberta Oats

1. They are especially adapted to corn belt conditions.
2. They will make you double the money you have been making from other varieties.
3. You will be able to sell them for seed to your neighbors for double the amount which common Oats will bring upon the market.
4. They are the earliest large variety grown.
5. They have a strong stiff straw and will stand up on any kind of land.
6. You can secure more seed value from one bushel of the large plump kernels than from any other variety.

The Most Practical Oat to Grow

This variety is particularly well adapted to withstanding a lot of wet weather at harvest time, as the straw is of such texture that it will withstand much punishment before it will go down. Because of this most excellent characteristic this variety of Oats is rapidly gaining in popularity.

Get some of our heavy yielding pure bred seed and grow the seed stock for your farmer friends. There is no way by which a wide-awake, energetic farmer can be of more use to the community than by introducing a variety of seed Oats which will double the yield of his neighbors' crops, and there is no way by which this same farmer can make as much clear money in so short a time as by putting in these crops and selling them out to the neighbors for seed.

Remember, we handle only the best and purest grades of seed that are grown, and ship all of our seed Oats subject to your approval. If they are not just as we represent them, ship them back and we will return your money and we pay freight both ways.

A Crop of Regenerated Swedish Select Oats Means More Money from Small Grain.

Regenerated Swedish Select Oats

The Regenerated Swedish Select is perhaps the largest white Oat that was ever introduced into the United States. It was introduced into North America by Garton Brothers of England, and is a decided improvement over the old Swedish Select. It has apparently retained all of the good qualities of the parent stock without any defects of the old. It has a very stiff straw with large sprangled heads with thin-skinned kernels and is the heaviest yielder known to America today.

All our Regenerated Swedish Select seed Oats are grown in Canada and the Northwestern States, and we do not hesitate to recommend them to you in the highest terms, for we feel satisfied they will meet your most exacting requirements in every way; and although you will find seed quoted at a very much higher price, you will not find anything superior in quality.

Be Sure You Secure Pure Genuine Regenerated Swedish Select Seed Oats

Do not confuse our Pure Regenerated Swedish Select Seed Oats with the common Swedish Select and many others that are being represented as the pure stuff or just as good. Remember that the market is filled with substitutes because of the enormous demand of this most excellent variety; so do not be fooled into buying any of these substitutes when you can send direct to us and secure the Genuine Regenerated Pure Swedish Select seed stock, which has been carefully bred up for its heavy yielding quality, its earliness, stiffness of straw, vigorous growth, white berry, thin hull, and drought-resisting qualities.

Why Our Regenerated Swedish Select Seed Oats Will Make You Money

The seed stock of our Regenerated Swedish Select Oats has all been subjected to a high power blast cleaner and you will find every kernel contains a strong, vigorous germ which will, when placed in the soil, push forth a plant with the punch behind it to make a rapid growth, enabling the crop to quickly shade the ground and smoothen out the weeds, guaranteeing you a big yield at harvest time.

Now, which is the cheapest, Oats that cost 50 cents or 60 cents per bushel and produce 75 per cent of a stand of weak, spindly plants, or seed oats germinating about 100 per cent, and pushing forth strong, vigorous plants capable of producing a big crop? Don't you think it will pay you to secure some of this strong seed stock?

One Farmers' Organization Sows Nothing But Canadian Seed Stock

In one locality we have furnished the farmers with Canadian grown Swedish Select seed stock for several years, and this year they have informed us that they will have to have several cars. Last year one of these farmers made us feel very much pleased indeed when he told us that although his Swedish Select Oats had been ripe for about three weeks they were still standing and he had hopes of saving many of them. This fact I felt demonstrated all we had ever claimed for this wonderful variety.

Our Seed Stock this Year the Best We Have Ever Grown

Our seed stock this year we believe to be the best we have ever placed upon the market, and when we consider the fact that we have placed thousands of bushels of this seed among the farmers of the Middle West, you can appreciate just what this statement means. All our stock has been carefully re-cleaned and graded, and you will secure seed stock which will give you nearly 100 per cent germination. Write us for samples and be convinced of the really high class quality of seed Oats which we are offering you.

PRICE—See green list for prices.

Northwestern Grown Swedish Select Seed Oats

To meet the demands of our customers for a grade of Swedish Select Oats of excellent quality, who do not feel that they can afford to purchase the imported seed for their entire acreage, we are offering seed of this most excellent variety which has been grown in the Northwestern States. These Oats are of the finest quality and no farmer can afford not to purchase this seed, and while we do not claim that they will produce the quality or yield that our Regenerated Swedish Select will, they have given such universal satisfaction that we do not hesitate to recommend them to you in the highest terms. Send for samples and get our prices on this great Oat. The Swedish Select has set the pace; others have followed. Grow the best. Order seed today. There cannot help but be a shortage with all of the corn belt clamoring for Seed Oats.

PRICE—See green list for prices.

Improved Silver Mine

This is today one of the most popular varieties and very widely grown in the Central States. This variety usually commands a premium on the market because of its clear white color, which makes it so desirable for the manufacture of rolled oats. This Oat has made quite a reputation as a heavy and reliable yielder and many farmers who have grown this variety for years would grow no other. It is beyond a doubt the best Oats for many localities, and we feel sure that you could make no mistake in sowing this variety, for the straw is strong and stiff enough to stand up well and not lodge readily, and the large sprangle top heads well filled with large, soft hulled kernels make it a very profitable crop to grow. The grain is much relished by horses.

PRICE—See green list for prices.

Golden Rust Proof Seed Oats

This variety has made a phenomenal record because of its rust resisting qualities and the wonderful yields produced under adverse conditions, while other varieties in adjacent fields were a total loss.

This rust proof characteristic is a big asset in this particular climate where we have the damp, foggy nights and the sun comes out so hot during the early morning hours, and where local showers, followed by warm sunshine, are prevalent. We do not believe you can beat our Northern Grown Golden Rust Proof Oats.

If your Oat crop was a failure last year, try the Golden Rust Proof; it has given most excellent satisfaction in those localities where all other varieties have failed, and we can most heartily recommend it to any of our farmer friends, who have been harvesting nothing but chaff, and we know that to try this seed is to be convinced of the excellent qualities possessed by this variety and not found in any other Oat.

This variety is the solution of your Oat troubles. Send for a sample of these Northern Grown Golden Rust Proof Oats and see if you do not become as enthusiastic as we over those big yellow kernels, capable of producing an Oat plant with rust resisting qualities.

PRICE—See green list for prices.

SPECIAL PRICES ON CLUB ORDERS

Farmers, get together and buy your seed oats in car lots. You can save more than enough to pay the freight. There isn't a community in the Corn Belt but what would be greatly benefited by changing their seed Oats. Get a car of our Pure Northern Grown Seed Oats and double the yield of your community. Read our great Profit Sharing plan and see how you can make a good thing for yourself. Increase the oat crop for your neighbors and save them money. Write us for samples and prices on a car of Pure Northern Grown Seed Oats.

The Kherson is the Favorite Early Oat and Never Disappoints.

Iowa 103

The New Sensational Early Oat.

This variety of early oats has probably caused more of a sensation among cereal feeders than any other oat. It was bred up by Prof. L. C. Burnett of the Iowa Station and is undoubtedly the highest yielding strain of early oats ever introduced.

This Variety Especially Adapted to the Middle West

These oats have a very short straw and while they do not reach sufficient height on thin hillsides they are especially suitable for growing on the heavy land of the Mississippi Valley. The heads are unusually heavy and a crop of this variety gives one the impression of being a solid mass of grain. These oats lodge to a certain extent but we do not believe there is any other variety that will outyield them in this section. Another feature about them that is to be recommended is that they are very early and because of their early maturing qualities they are mature before the hot dry weather that is so detrimental to the oat crop in this section.

Secure Some of this Seed

You should not fail to secure some of these wonderful high yielding oats. These are the oats that will make you money on your corn belt farm. They will double your yield. We do not believe there is any way that a wide awake energetic farmer can be of more service to the community than by introducing this variety of seed oats. There is no way that this same farmer can make as much clear money in so short a time as by putting in a field of these oats and selling them out to his neighbors for seed. We have an excellent lot of these oats. They have all been carefully re-cleaned and tested for germination and we feel sure that they will please you in every way.

Price—See green list for lowest prices.

Sixty Day Selected

The Sixty Day Oats, on account of its extreme earliness, has proven to be one of the most popular varieties ever introduced into the southern half of the corn belt. Because of the extreme earliness of this Oat it is enabled to make a crop in those sections where later varieties would be a failure, for it succeeds in making its growth and ripening before the extreme hot weather and hot winds, which often prove so disastrous to some of the later varieties. The Sixty Day is certainly a very valuable variety. It is giving satisfactory results over a wide range of territory. It is at least a week ahead of any other variety. The straw being short and not subject to lodging makes it one of the best varieties known to use as a nurse crop.

The small, yellow kernels are very rich in feeding value, and the straw is the most palatable of Oat straws. Another advantage in growing Sixty Day Oats is that you are often able to get your crop on the market ten days or so earlier than you otherwise would and often secure the advantage of the market. Our seed is Northern grown and we feel that it will please you in every way. Try these wonderful Oats and increase your yield.

PRICE—See green list for lowest prices.

Early Champion

This is an old well established variety. It is one of the very earliest oats known and can always be relied upon to give a fair yield of grain. These oats grow a short, very stiff straw, always stand up well and ripen very early. Because of these characteristics they have gained much fame as a nurse crop for the grasses as they do not smother the young grass by lodging.

Another feature that is much in their favor as a nurse crop is the fact that they can be harvested very early. In fact, this variety has sometimes been called a Fourth of July oats because they are always ready for harvesting at that time. This variety has gained much fame throughout the corn belt on account of their being such consistent yielders, as while they are not as heavy a yielding variety as some, they can always be depended upon to make a very fair crop and if you contemplate sowing any grass seed with your oats we cannot recommend this variety too highly to you.

PRICE—See green list enclosed.

Iowa 105

This variety is another one of the master achievements of that famous plant breeder and farm crop expert, Prof. L. C. Burnett of the Iowa Experimental Station. This variety is without a doubt the heaviest yielding variety of early Oats known.

The Iowa 105 like the Iowa 103, as the name implies, was bred up at the Iowa Experimental Station and is especially adapted to corn belt conditions. The great advantage that this variety has over later varieties is the fact that they usually escape the hot weather at the time of filling and produce a heavier yield than if they matured later. The grain of this variety is white and plump. It has a thin hull and is certainly an excellent variety to grow under average corn belt conditions.

We have never had a single complaint on this variety and our customers are growing thousands of acres of these Oats. If you are not growing them you should certainly start this year as they will make you more money than any early Oat that you could grow.

PRICE—See green list enclosed.

Kherson Oats

The Great Little Oat of the Corn Belt.

The Kherson is a small yellow Oat, with a very thin hull, being practically all meat, and has short, stiff straw, which is very high in feeding value. This Oat since its introduction a few years ago has proven a big asset to the farmers of the corn belt, for its early maturing qualities have placed it in the shock before the hot, dry weather could damage it.

The Oats are very heavy and will surprise anyone by their enormous yields, and we feel sure that this variety will add from 20 to 40 bushels of Oats to your yield this year.

The Iowa Agricultural College has in a five-year test placed this Oat above all other varieties of the well known sorts from a yield-per-acre standpoint, and because of their short, stiff straw they are much less likely to lodge, and we have never known a failure where this variety was sown.

PRICE—See green list for lowest prices.

GROWING THE CROP

SOIL—Oats have the ability to adapt themselves to poor soil better than most of the other cereals, but they are very particular about moisture requirements, and should be placed on relatively moist soils.

PREPARATION OF SEED BED—Oats grow quite well on comparatively compact soils, and it is not necessary to prepare the seed bed as deep as for some of the other cereals.

SEED AND SEEDING—Too much emphasis cannot be placed on the importance of securing good seed stock. The Ontario Agricultural College in the seven years' experiment shows that larger seed produced 15 per cent larger yields than medium size seed, and 31 per cent larger yields than small seed. Many other stations have agreed that to secure good heavy seed is of the most importance. Oats should be sown to a uniform depth of not to exceed one inch, and closely allied with uniformity of depth and distribution is the thickness of seeding, and through the numerous experiments that have been carried on to determine what rate of seeding was the most profitable, it has been shown that on an average from three to four bushels of the larger varieties of Oats produce the heaviest and most profitable yields. Oats may be sown broadcast, or with a drill, with about equally good results, some advantage being claimed for the drill in a more even covering of the seed, thus insuring a higher percentage of germination. All seed oats should be treated for smut, for no other enemy of the oat plant has caused such enormous losses as has smut.

HARVESTING—Oats are usually harvested while in the hard dough stage, as when cut at that time they do not shatter as badly as when cut later, and if cut earlier than this the shrinkage of the grain is so great as to cause serious loss. The quality of the straw is improved by being harvested before the grain is in the hard dough stage, but the shrinkage in the quantity of grain more than offsets any advantage to be gained. The Oats may be either threshed from the shock or stacked, and allowed to go through the sweating process, which materially improves the quality of the grain.

Our Improved Seed Stock Will Greatly Increase Your Yields.

Barley

Barley Ranks fourth in the list of important cereals in the United States. As the acreage is increasing each year it shows that it is gaining in popularity, and the farmers are becoming convinced of its high yielding and feeding qualities.

Barley has proven to be a much more profitable crop throughout the Middle West than has either Oats or Spring Wheat and our Improved Barley, is going to be the means of making it possible to produce greater yields of high quality food stuff per acre than can be grown by sowing other cereals. Barley by its chemical analysis, shows that it is equal bushel for bushel in feeding value to corn, and as it commands a higher price and produces more bushels per acre it makes a more desirable crop.

The following will illustrate the value of careful methods in seed selection; and I think will convince you of the importance of sowing nothing but seed which has been carefully re-cleaned and graded. The Ontario Station in an average of six years' experiments obtained 20 per cent larger yields when nothing but plump seed was used than when the crop was grown from inferior seed. Think of it, 20 per cent, one-fifth more grain grown from using plump seed than an inferior grade. The yield is invariably heavy when a good quality of seed is sown. We wish to impress upon you the absolute necessity of securing good seed to grow a successful crop of Barley.

Barley is more certain to produce a crop than any of the other cereals, for it will stand up better, does not lodge readily and will stand more hot, dry weather or wet, foggy days than will any of the other grain crops; in fact, it is more certain to produce a crop under any conditions than any grain which you can grow.

Varieties

SUCCESS BEARDLESS BARLEY

This is a very early variety, with a short straw, and is very much in demand as a nurse crop. This variety of Barley is not so heavy a yielder as some of the more improved varieties, but because of its excellent nurse crop qualifications it is still very much in demand. Our seed has all been thoroughly re-cleaned and graded, and we are in a position to furnish you an excellent quality of Success Beardless Barley, if you desire to sow it, for our seed stock has all come from a reliable source, and is first-class.

PRICE—See our green list for latest quotations.

CHAMPION BEARDLESS BARLEY

This Barley resembles the Success, but it matures earlier and is a very much heavier yielder. The straw is stiff, which insures it standing up well even under adverse conditions. It grows very rapidly and time of ripening can be governed to a great extent by the time of seeding. Some have reported sowing it at a time Spring Wheat was sown and harvesting the crop the latter part of June. Under such conditions as this, Champion Beardless Barley makes a wonderful crop to raise as the great quantity of the very best of feed can be obtained at a time when the prices are highest.

We have a fine lot of seed of this superior high yielding variety, and as it has been carefully graded and re-cleaned we can most heartily recommend it to you. Make up your mind to grow some of this great crop this year, send to us for samples and secure our extraordinary prices.

PRICE—See our green list for latest quotations.

THE GREAT WHITE HULLESS

The extraordinary feeding qualities of this great Barley cannot be fully appreciated only by those stock raisers who have given it a trial on their own farms. There is no Barley that has ever been produced that will add quicker, more economical gains on animals than will this great variety of feeding Barley. This Barley, because of its high feeding value should be fed much lighter than other varieties of Barley, for because of the absence of the hull, which is removed in threshing, it most generally weighs better than 60 pounds to the bushel, and is all feed. Many of the most experienced feeders follow the practice of mixing this Barley with Oats and grinding the two together. In fact this process is followed almost exclusively throughout the Northwest where this Barley is used for feeding purposes by the very best stockmen throughout that section.

Our seed has been especially grown for us by the very best growers in the business, has been especially bred up for its high yielding quali-

ties and feeding qualifications. If you want a barley which will be one of the most valuable additions to your feeding ration and one with a stiff straw that will stand up straight and not lodge, do not fail to sow some of this great White Hulless.

PRICE—See our green list for latest quotations.

ODERBRUCKER BARLEY

This variety of Barley was developed by Professor Moore, of the Wisconsin Experimental Station. It was carefully bred up on the Wisconsin Station Farm for ten years, and Professor Moore regards it as the most satisfactory Barley, all kinds considered, that was ever produced on the station farm. It has a very stiff straw and is quite drought resistant, showing a superiority in this respect over any other variety tested on the station farm. It is claimed this Barley contains nearly double the amount of protein found in any other variety of Barley. Because of its high protein contents it is considered one of the best varieties for both feeding and malting purposes. Our seed has been carefully grown and selected from good seed stock, and carefully re-cleaned and graded.

PRICE—See our green list for latest quotations.

MANSHURY'S BARLEY

This variety of Barley was introduced from Manshury, China. It is a six rowed variety. This is the Old Reliable variety. It has been the National standby for many years, and still heads the list in productiveness according to some of the best agricultural authorities on Barley growing in the United States. Manshury Barley is better adapted for feeding purposes than for malting. This variety of Barley is probably more extensively grown than any other variety, and has a great number of phenomenal yields to its credit. The strain of Manshury which we are offering is an improved strain, has a plumper berry and will yield from 10 to 15 bushels more per acre than the old variety. Our seed stock is plump, heavy and bright; it has been carefully re-cleaned and graded, and we feel confident that it will please you.

PRICE—See green list for prices.

GROWING THE CROP

SOIL—Barley prefers a well drained and light, rich soil.

PREPARATION OF THE SEED BED—Barley should be grown under as uniform conditions as possible, therefore good clean ground, well disked and pulverized in the spring furnishes a desirable seed bed.

SEEDING—Barley is usually seeded shortly after the Oats are put in, but as Barley will flourish in warm, dry weather a delay in seeding is not as detrimental as in the case of Oats or Spring Wheat, and Barley fits very nicely into the cropping system because of this characteristic. For oftentimes there are seasons when you can not sow Oats because it is too late before the ground can be put in shape; but in the case of Barley which does not need to be seeded so early the ground can be prepared. Wide variations in the rate of seeding seem to give as equally good results, but two bushels is the amount ordinarily sown, as there are somewhat less number of seeds in a bushel of Barley than in a bushel of Wheat or Oats, and as thin seeding is conducive to irregular ripening and as Barley stools less than Oats, we would not advocate sowing any less than two bushels per acre, and would prefer two and one-half under average corn belt conditions.

HARVESTING—Barley is usually harvested somewhat earlier than either Wheat or Oats. It should, however, be allowed to remain standing until thoroughly ripe, especially if it is to be sold to breweries, for if the grain is allowed to thoroughly ripen before harvesting, a more mealy endosperm will be obtained, while if cut before it is ripe a harder and flintier grain is obtained.

MARKETING—Barley is sold upon the market either as a feed or brewing Barley. Its requirements for a brewing Barley are very exacting. There is very little of this grade of barley produced, as any discoloration or mustiness depreciates the value of brewing Barley, but when one secures a good grade of Barley it usually brings from 15 to 20 cents per bushel over that of the common feeding Barley.

Notice the Height of This Crop, Which Seldom Fails to Make a Heavy Yield.

Emmer or Speltz

Emmer is a Russian Cereal closely resembling Barley, and although of comparatively recent introduction into the United States it has met with almost universal favor, and although especially adapted to the semi-arid districts, it is proving equally as popular under Corn-Belt conditions. The Winter Emmer is grown quite extensively in Kansas, Nebraska, Oklahoma, and Colorado, while the Spring or White Emmer is a universal favorite in the Dakotas. Emmer is a hardier plant than wheat and will give better results on poor soil and in a cold dry climate than any other cereal. Its straw is shorter and stiffer than that of wheat and it stands up much better and is not as liable to rust. It matures a crop with the least amount of moisture of any other of the cereals and the straw ranks next to oat straw in feeding value. In many sections in the West it can be grown where wheat, oats and barley would be a failure, and it is a crop which is proving of the utmost importance to the dry land farm throughout the Western States. Reports from those who have grown Emmer under Corn-Belt conditions speak very flattering of its wonderful yielding power and high food value.

Why Emmer Should Be Grown on Every Farm

1. It will produce a heavier yield of grain per acre than any other cereal.
2. It is readily eaten by all kinds of stock, and it has been shown that all kinds of stock thrive exceedingly well upon it.
3. It will grow on land which would not produce a good crop of other cereals.
4. It will stand unfavorable conditions much more readily than any other crop.
5. It is especially adapted to a wide range of conditions.
6. It matures early and neither rusts, blights nor lodges.
7. It will produce an excellent quality of hay if cut at the proper time. There are many other reasons why you should grow this wonderful crop, and we feel that any one of them would warrant your making a trial of this greatest and most valuable of all the cereals.

Emmer a Heavy Yields

Emmer will unquestionably yield a greater amount of grain per acre under the average dry farming conditions than any other crop, and when you consider that it is equal in feed and value to either corn or barley, you can readily understand why we are so enthusiastic over having our customers grow some of this most wonderful of all cereals, for there is no other crop which can be grown under dry land conditions that will bring in the revenue that a crop of Emmer will. It not only brings a good price upon the market, but when ground produces one of the most appetizing and nutritious feed stuffs for the stock farm which can be grown, and is eaten by horses, cattle, sheep and poultry with equally good results.

Speltz the Big Money Crop Easy to Grow

Speltz is the easiest of grain crops to grow. It will thrive on any soil, and in any climate, where any other crop will grow. It needs no special preparation of the seed bed, as it can be sown on land prepared the same as you would for barley, wheat or oats. The straw is shorter and stiffer than wheat, and it does not rust or lodge. It can be sown much earlier than any of the other crops, for frost will not injure it. It should be sown at the rate of 2 to 2½ bushels per acre, and may be either broadcasted or sown in drills. It is harvested when in the hard dough stage, the same as other grain, and threshed the same as wheat, except you use fewer concaves and leave the outside hull on.

Speltz the Cheapest and Best of Feeds

Cut down the feed bills. Grow the crop that produces heavy yields of the most nutritious feed. Speltz is especially to be recommended for milk cows and swine, for when mixed with bran or shorts it produces a food which cannot be excelled. Speltz is very rich in protein, the most valuable of all food stuff, and no live stock farmer can afford to be without it.

If You Are Not Growing Speltz Be Sure and Grow It This Year

You cannot afford to not grow this great crop. It produces the cheapest feed known, and to give it a trial is to become convinced of the wonderful possibilities of this great cereal. The enormous yield of rich, nutritious grain, and the heavy crop of straw, which is nearly equal to hay, we know will please you. No matter in what section of the country you are located, you can grow this crop with good results, for it can be grown in every state in the Union. Don't delay ordering, but make sure that you will have plenty of feed and sow Speltz.

Varieties

White or Spring Emmer or Speltz is very similar to Barley in appearance and growth, and it is especially adapted to the semi-arid districts of the Northwest, and can be relied upon to produce a fair crop even under the most adverse conditions. It produces heavy yields of grain, and straw which is equal in value to oat straw. Its extreme hardness and drouth resisting qualities, together with yielding qualities that surpass any other cereal makes it a grain of the utmost importance to the farmers in the North and Northwest.

Our seed stock has been bred up from the most hardy, high yielding strains, and has been carefully re-cleaned and graded and we believe that we are in a position to furnish you with the best that can be procured, and we know that it will prove to be the cheapest and best feed which you have ever grown upon your farm.

Price—See green list for lowest prices.

Winter or Black Emmer. Winter Emmer, although a comparatively new crop, has in recent years increased in cultivation very rapidly as the farmers have begun to realize the great importance of this hardiest of all cereals. Winter Emmer produces where no other cereals thrive, and is without doubt the most valuable acquisition ever made to the possible list of cereals adapted to dry farming conditions, for it thrives in the hot dry summers of the semi-arid districts and gives most excellent yields. See green list for prices.

GROWING THE CROP

SOIL—It will grow on any soil or in any climate where any other grain crop will grow.

PREPARATION OF THE SEED BED—It can be sown on ground prepared the same as that upon which you would plant barley, wheat or oats. It is sown broadcast or by the use of a press drill.

SEEDING—Emmer is usually sown at the rate of two to two and one-half bushels per acre. The frost will not hurt Spring Emmer or Speltz after it is sown. It will be put in much earlier than other cereals. Black or Winter Emmer should be sown about the same time as Fall Wheat.

HARVESTING—Cut the grain when it is a little past the milk stage, when it will make a splendid grain and lots of straw.

Our New Marquis Wheat Not Only Makes the Largest Yield but the Finest Bread.

Spring Wheat

Wheat comprises one-fourth of the acreage, yield and value of all the cereals in the world. Wheat has been the staff of life for ages, with no other crop so close to the life of humanity. During the war we learned the vital importance and the real value of wheat, when the American Farmer was called upon to feed the world.

Three-fourths of the wheat-producing area of the world suffered during the war to such an extent that thousands of acres were devastated and thousands of other acres were left idle. To bring these lost acres back to production and to fill up the world's flour barrel as it was before the war will require time. The whole world is short of wheat, necessitating high markets. Now is the opportune time to make a fortune in raising wheat.

Get your share of the returns from this greatest of all cash crops, for this undoubtedly is the most opportune time for engaging in the wheat growing industry. The whole world wants wheat. There will be less acreage sown than before. The market will be strong. Now is the time to make money in raising wheat as never before. Choose the best variety, get good seed, and you will increase the yield.

Varieties of Spring Wheat

NEW MARQUIS

New Marquis is from a week to ten days earlier than any other variety. It was originated by Dr. Charles and William Saunders, of the Central Experiment Station, Ottawa, Canada, and is the result of crossing the Red Fife and Hard Red Calcutta, a native of India. By this cross breeding a variety has been produced having the remarkable characteristics of the earliness of Calcutta and the yielding and drought resisting qualifications of the Red Fife. It has a medium short straw, which is very heavy, rendering it less liable to lodge than the other varieties. The kernel is very hard, dark and plump. In fact, it is the most beautiful wheat we have ever seen. When you consider that this is the wheat which won the Championship Prize at the New York Grain Exposition, the \$3,000 prize at the International Dry Farming Congress held at Lethbridge, Alberta, and again winning in open competition the sweepstakes prize at the Dry Farming Congress, Tulsa, Oklahoma, you can commence to appreciate what a really great wheat it is.

New Marquis Wheat is the most productive variety which has ever been known, and no other variety of wheat combines earliness, productivity and quality to such a degree as does the New Marquis. Because of these most excellent qualities you cannot afford to sow any other variety of Spring Wheat, if it is at all possible to secure New Marquis.

We have an exceptionally fine lot of seed stock which has been grown for us by the best breeders and growers in the Northwest, and we do not hesitate to recommend our seed or place it in competition with any other seed stock which is being offered. It will prove the biggest money making proposition you have ever tried, and its superiority and quality and high yielding qualifications place it above all other varieties of seed wheat.

You cannot afford to grow the common varieties, as there is very little left after paying expenses and harvesting and mar-

keting the crop; when you can secure the seed for growing this remarkable variety for very little more money than inferior seed would cost you, you should not fail to take advantage of the opportunity to secure the seed stock for growing this most wonderful variety. See green list for prices.

Spring Rye

A cereal of comparatively recent introduction is Spring Rye. The fall sown rye has for many years been one of the leading cereals, but it remained for recent plant breeders to develop a strain of rye that could be profitably sown in the spring. In fact, only within the last two or three years has this cereal been grown in any quantities.

Our Strains of Spring Rye Big Producers

For several years we have been working along with the growers of this crop and we believe that we have Spring Rye that for quick development is hard to beat. Whether you want rye for growing a quick pasture or for producing a grain crop, we feel that the seed we are offering you cannot be beat.

The Advantage of Growing Spring Rye

Probably no other crop offers the unusual advantages that a crop of Rye does.

1. In years when one is short of pasture it will produce the quickest pasture that can be grown.
2. It can be pastured during the early spring and yet produce a good crop of grain.
3. As a fertilizer it is second only to the legumes.
4. It can be grown on thinner land than any other cereal.
5. The grain is threshed at a time when one is usually short of feed, and for young and growing pigs you cannot beat ground Rye.

When one stops to consider that any of the above reasons would in itself warrant one in growing this crop in preference to some of the other cereals. This is especially true in the case of the man who has a small farm and is compelled to get the most out of his land.

Rye is also an excellent crop for one to grow who keeps a lot of live stock on a small acreage, as it not only produces grain but pasturage and forage as well. We believe that there is a place on every farm for at least a few acres of Rye. The feed lots can be plowed up and seeded to rye, or it can be sown in the thin spots where you failed to get a stand of corn. If you have any thin clay points, there is the place to sow rye. You will be surprised at the amount of fertility in a crop of rye turned under. Don't delay getting your seed, as there is never enough to supply the demand, and we are always forced to disappoint some who come late in the season asking for it. Prices—See green list.

A Big Bargain in Grass Seed

We wish especially to call your attention to the advantages offered in buying our Alsike and Timothy Mixed this year. We went out early last fall and contracted for several million pounds of this seed, and we are going to give you the advantage of our early purchases and save you a lot of money on your seed supply.

Reliable and Unquestionable Proof of Good Seeds and Good Service

Says Our Clover is Fine.

Wrightsville, Pa., February 18.
I received the clover seed in good condition. It is fine seed.
FRED ROTH.

Our Seeds O. K. Sends Another Order.

Rutledge, Tenn., February 28.
Seeds arrived all O. K. in good condition. I sent you another order yesterday, hope they will come in promptly.
J. C. BEECH.

Well Pleased with Cow Peas and Soy Beans.

Worthington, Ind., February 2.
I received my shipment of Cow Peas and Soy Beans today in good shape. I am well pleased with them and would like to get your catalog next year.
CLARK DAYHOFF.

Thanks Us for Prompt Shipment.

Pilgrim, Ky., March 1, 1919.
Received the seeds ordered and am highly pleased with them. That is about all I can say this spring. Thanking you for your prompt shipment, I remain,
J. D. HARMAN.

Order Received in Splendid Shape.

Hicksville, Ohio, March 21.
This is to let you know that order No. 38858 was received yesterday all O. K. in splendid shape.
W. I. E. ENSIGN.

Showing Our Samples to Neighbors.

Dundee, N. Y., March 15.
I received the samples of seeds all right and they are O. K. I have been showing them to some of my neighbors and will send you an order in a few days.
JOHN ARWINE.

Grass Seed O. K. Thanks Us for Promptness.

East Corinth, Me., March 28.
The bag of grass seed came today O. K. Thank you for promptness, in sending.
W. D. WASHBURN.

Trusts to Have Further Dealings.

Nashville, Ind., February 24.
I received shipment of seed and they were all O. K. I was well pleased with them. Trusting we may have further dealings, I am,
ED. REECE.

Parcel Post Shipment O. K.—Many Thanks.

Aldrich, Mo., April 2.
Received seed by parcel post O. K. Many, many thanks.
J. M. WRISTON.

Proud of Our Clover.

Yadkinville, N. C., March 22.
I received the 160 pounds clover today and am surely proud of them. They are fine seeds and I hope to give you more orders in the future.
J. G. KNIGHT.

Finds Germination Satisfactory.

Munger, Minn., April 29.
Received the seed order No. 51243 in good condition and tested it for germination and find it very satisfactory. Thanking you for your promptness.
A. J. SUNDQUIST, Pur. Agt.,
Southside Farmers Club.

Used Our Seed Five Years and Recommends It to His Neighbors.

Allegheny, N. Y.
I have used your seed for 5 years and am well satisfied with it, and highly recommend it to my neighbors.
JOHN MINDERLO, Sr.

Thinks Service Merits Recognition—Will Speak Well of American Mutual.

Falls Church, Va., R. No. 1.
Dear Mr. Summers: I want to thank you most cordially for the attention my seed order received from your firm. I mailed my order January 22 at 4:30 P. M. and the seed was on my farm February 1, 10 A. M. That kind of service merits recognition. I will say a good word for the American Mutual whenever the opportunity presents itself. The seed is satisfactory and I have no doubt that its germination is up to its appearance. Wishing you much success,
J. I. SCHULTE.

Better Service Than Any Before.

Marcellus, Mich., March 25.
I have sent a good many orders to different seed companies but you certainly sent the seed more promptly than any one before. The Alsike was just fine and I will certainly send you my next order.
MRS. FLORENCE HAYES.

Neighbor Was Afraid to Send Money Away for Seed.

West Lessport, Pa.
I received my seed and it was all right and I am well pleased with it. When I need more I will send to you. A neighbor asked me if I was not afraid to send so much money away for seed and I handed him your catalog you sent me.
ALBERT ROTH.

Thanks Us for Attention and Courtesy.

Sag Harbor, L. I., N. Y.
I write to thank you for your prompt attention and courtesy on my order. I am well pleased with it and will recommend your company to prospective customers.
JOHN K. MORRIS.

Clover O. K.—Thanks Us for Interest Shown.

Lebanon, Ind., February 8, 1919.
I have received my clover and it is O. K. Thanking you for your past favors and interest you have shown to me, I am,
JAMES O. SLAGLE.

Patrons All Well Pleased.

Somerset, Pa., March 1, 1919.
The seed arrived in good shape and as far as I know all the patrons are well pleased with it. The order came right through so we did not have to wait as it sometimes happens with the R. R. Company.
A. B. HOFFMAN.

The Best Stand He Ever Had.

Matoaka, W. Va., March 3.
I want to let you know that my seed arrived all right and it is fine. I want to inform you that I sowed the 6 acres of Alsike and Timothy last spring and I never got a better set of grass in my life. All my neighbors say it is the best they ever saw and I want to let you know I am well pleased with it.
W. R. MCCOMAR.

Sends Order for Himself and Neighbor and Thanks Us for Kindness.

Bangor, Mich., April 1, 1919.
I am sending under separate cover an order for myself and neighbor. I want to thank you very much for your kindness and if ever I have a chance to send any business your way I certainly will do it.
H. GARDNER.

Satisfied with Dairy Feed and Seeds, and Thanks Us for Promptness.

Kniman, Ind., April 2, 1919.
It is with pleasure that I write to inform you that I have received both dairy feed and seeds and all in fine shape, and I surely appreciate your very prompt attendance to matters. I will surely speak a good word for your house.
JOHN O'CONNOR.

Clover, Alfalfa and Timothy Coming Fine.

Warsaw, Va., April 9.
Received the potatoes today. The clover, alfalfa and timothy are coming fine. I have given your price list to some of my friends and expect they will give you an order. I may want some millet later on. Send me another price list.
C. H. CONSTABLE.

Seed was More than He Looked For.

Homerville, Ohio, April 15.
Received the seed ordered from you promptly and same is more than I looked for so was agreeably surprised. Thanking you for your fairness and promptness, I am,
BERT C. BELL.

Grass and Clover Finest He Ever Saw.

Sherman, N. Y.
Some time ago I ordered grass and clover seed. It arrived O. K. and is the finest looking seed that I ever saw.
A. J. HARPER.

Will Order Again in the Fall.

Snydertown, Pa., May 2.
Received my shipment all O. K. Not a thing the matter with them. You surely will hear from me in the Fall.
GEO. L. MOYER.

Next Year Will Order All His Seed From Us.

E. Liberty, Ohio, May 18.
I wish to say that my orders amounting to about 83 bushels were filled to my perfect satisfaction. I put in 152 bushels this year and expect next spring I shall come to you for all my seed.
C. A. FREER.

Seed Corn

The so-called Lake region probably offers one of the most difficult problems in the United States. The average coolness of the season makes it extremely difficult to secure seed suitable for growing here in Northern Illinois, Southern Wisconsin, Michigan, and Northern Indiana. In order to meet this situation we have made a careful study of conditions here in the Great Lakes region, and have spent a lot of time and money developing varieties suitable for growing in this particular section. We believe that we are in a better position to furnish you varieties of corn that will prove a real benefit to you than any other firm.

We Make a Specialty of Corn Suitable for the Northern Half of the Corn Belt

While we handle corn suitable for growing in most every state in the Union, our specialty is early maturing corn, suitable for growing here in the northern part of the Corn Belt. The seed we sell for growing in this region is grown here in Northern Illinois, Michigan and Wisconsin. Being acclimated to this particular locality makes our seed especially desirable for growing in the Great Lakes region.

Our Early Yellow Dent has been developed here in Northern Illinois and has proven to be especially adapted not only to the Great Lakes region but to the Eastern States where a variety of corn that will mature reasonably early is desired.

The Illinois Special

This variety of corn has been grown throughout Central Illinois for a number of years and has proven one of the most popular varieties ever introduced. It is not an early corn, but only a medium maturing variety, maturing in from 110 to 115 days. This is the big heavy crop kind, the one that will break down the corn crib and choke up the elevator. The corn that has placed Illinois on the map as the greatest agricultural state in the Union. No one who has never seen this corn can appreciate its wonderful qualities, and we do not hesitate to recommend it as the best and heaviest yielding corn that has ever been introduced. It will swell your profits and increase your bank account; this is the kind of corn that pays off the mortgage on the old home; it's a regular mortgage lifter.

It is the Stockman's Favorite

There is no better feeding corn grown than the Illinois Special. A chemical analysis of this variety shows that it contains a high percentage of oil and carbohydrates, the most necessary constituents in making up a fattening ration. These are the elements which tell you what a bushel of corn is worth when it comes to putting a gain on a bunch of cattle. This is the kind of corn which makes you smile when the cashier hands you the account of sales on a bunch of cattle that you thought cost too much money when you put them in the feed lot. It's the kind of corn that makes a man money on these high priced feeders, for the richer your corn in oil and carbohydrates the more gain you will get from each bushel of that corn you feed. This is the variety that the most successful feeders agree is the "best cattle corn." Try a few bushels of this great feeders' favorite and you will be convinced of the exceptional feeding qualities of this wonderful variety.

Description

This variety is not a show corn, it is too large for a show corn. But it's the corn that grows the bushels. The ears range from 10 to 12 inches in length, and from 7½ to 8½ inches in circumference, with from 16 to 18 rows. They are cylindrical in shape with well filled butts and tips and weigh from 14 to 18 ounces. The cob is rather large, and is well covered with deep, broad kernels of a rather dark yellow color, shading off in some cases to a reddish cast. The germ is exceedingly large, which makes it such a strong, vigorous grower, withstanding wet and cold weather to a considerable degree.

The Seed of This Variety Has Been Carefully Selected

The seed we are offering you of this variety has been carefully selected, graded and stored, and we know that it will please you. This is one of the best varieties of corn we know of and if you are not growing this corn we would urge you to do so at once. Price—See green list for prices.

Reid's Yellow Dent

The old standby of the Corn Belt, the variety that has won more grand championship prizes than any of the other varieties at the leading corn shows throughout the United States. The ears are of medium size, are very uniform and of a bright yellow color. It is a deepkerneled, small cob corn, giving you a very high shelling percentage. It matures in from 115 to 120 days and is especially suited to the central and southern half of the Corn Belt.

The strain of Reid's Yellow Dent which we are offering has been especially bred up for its high yielding qualities and for good strong land we do not believe you will find a variety of corn which will produce the bushels for you that our Reid's Yellow Dent will. The members of our firm, I think we can say without fear of contradiction, have done as much if not more actual breeding work with this variety than any other seedsmen in the United States and we feel that in offering you seed from these high-yielding parent ears that we are offering you a grade of seed corn you cannot secure elsewhere.

Description—Our type of Reid's Yellow Dent is somewhat rougher than that of most breeders, but we believe we have a strain of Reid's Corn which will dry out quicker than the old smooth type and one that is much better feeding corn than the old type, as the kernels are not as flinty. The ears range from 9 to 11 inches in length, are cylindrical in shape, with well filled butts and tips and straight rows. The kernels are very deep and of a light golden yellow color. Don't fail to secure some of this corn for that sod land which you are breaking up this year, for there is no other variety that will yield you the bushels which our high yielding Reid's Yellow Dent will produce.

Illinois Special.

Illinois Ideal Always Produces a Heavy Yield of the Very Finest Corn.

Illinois Ideal

The Great White Corn of the Corn Belt

This is one of the largest varieties of white corns known, and it can be grown over a wide range of latitude. Farmers as a rule are getting tired of small-eared varieties of corn, what they want is a large ear with lots of corn on it, and to meet the demand of the wide-awake, progressive farmer for a variety of white corn that is large enough to secure an enormous yield and early enough to mature throughout the corn belt, we are introducing our Illinois Ideal, for we believe without a doubt it is the largest early maturing corn that has ever been placed before the American farmer. It is very productive, and its strong, vigorous stalks, that often have two large ears to the stalk, will make you wish you had planted all Illinois Ideal. Its great advantage over all other varieties in size and number of ears makes it possible to secure thirty-five or forty bushels more per acre than from common size corn.

Description—The Illinois Ideal is a white corn, whose great size and number of ears on the stalk gives it a decided advantage over other varieties of white corn. The ears range in size from 11 to 13 inches, and are large around according to their length. The ears are quite cylindrical in shape and are well filled over butts and tips. The kernels are rather large, slightly dented and of medium length. The rows are usually quite straight and the ears weigh from one to two pounds. The Illinois Ideal is certainly a wonderful corn, and under ordinary corn belt conditions will produce a sensational crop.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Improved Iowa Silver Mine

The Reliable Mortgage Lifter. This variety of white corn, because of its ability to produce bountiful crops even under the most adverse conditions, has long been regarded as the corn to meet every condition of soil, rainfall, temperature and tillage, or as "Topsy" would say, "It was not raised, it just grewed," and if any variety of corn will just grow, Silver Mine will do it, for its deep root system enables it to withstand a maximum amount of drouth, and its ability to mature in 110 days insures its producing sound corn even during the most trying years.

Description—The ear is cylindrical in shape, has a small cob, the kernels are deep and rough and of a creamy-white color. The stalk is a little below the average height, and the root system is stronger and more vigorous than in any other corn, giving this variety the reputation of being able to stand more extremes of drouth and heat than any of the other varieties.

Our seed stock has been very carefully bred up and we are in a position to furnish you with something extra good.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

The New Corn, Planter

Our Blue Ribbon Pedigreed White Seed Corn

This variety is an improvement on the old "Boone County White." In it you will find a white corn that will meet with your approval anywhere it will mature. This is the show corn of the white varieties, and if you are looking for a white corn of good size and maturing in from 110 to 115 days, you cannot beat the Corn Planter.

The Corn Planter is without a doubt the best variety for a combination crop for grain, fodder and ensilage purposes that there is in existence, and it is considered by many to be the best breed of white corn known.

Description—The Corn Planter is a pure white corn, the ears averaging from ten to eleven inches in length and big in circumference in proportion to its length. It has from twenty to twenty-four rows of kernels, the grains fitting very tightly together, the butts and tips are well covered with deep, well-shaped kernels. It matures in about 110 days, making it a very desirable corn for growing throughout the central portion of the corn belt. It has a strong, vigorous, well-braced stalk, with the ears on a short, medium sized shank, and while the ears lop over because of their weight they do not blow off readily as in the case of many other large eared varieties.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Saint Charles White

The Great Ensilage Corn of the Corn Belt

St. Charles White is distinguished by its red cob and chalky white kernels, which make it very much in demand by the millers for its extreme whiteness; produces a meal that cannot be duplicated by any other corn, and they will pay a premium for it. This corn is a very heavy yielder and is grown very extensively in many sections of the Corn Belt, for it not only yields a heavy crop of large, well shaped ears, but its heavy foliage makes it one of the most desirable fodder crops, and for ensilage it cannot be surpassed.

If you are growing White Corn for the market you cannot afford to be without the St. Charles White, for the additional revenue which it will bring you is a feature which you cannot afford to overlook.

Description—The ears are cylindrical in shape and large in size, ranging from 9 to 12 inches in length, with deep, medium rough kernels, whose chalky whiteness usually makes them command two to three cents above the market.

Our seed stock is of the purest grade, and while our prices may seem extremely modest for such exceptional quality, we wish to again call your attention to the fact that we are field seed specialists and handle hundreds of bushels of each variety, while other firms who handle smaller amounts necessarily can not handle them as cheaply as we do.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Early Dent Varieties of Corn

Early Yellow Dent

In order to meet the demands of the farmers in the northern part of Iowa, Illinois, Minnesota, the Dakotas, Wisconsin and Michigan, for a regular type corn which would generally ripen for them, we have been breeding up our Early Dent. We took as a base for producing this early corn the genuine Johnson type of Reid's Yellow Dent, and by making field selections we experimented in producing an early corn which although not quite as large as the original Reid's Yellow Dent is a corn of fair sized ear, which will mature in about 100 days and we believe after seven years we have succeeded in fixing a type which is extremely early and will under ordinary conditions mature anywhere that corn can be grown.

This variety has proven very successful in the East and has ripened there where they thought it was impossible to grow anything but flint corn. We do not hesitate to recommend this variety to any of our customers wishing to secure a variety of Early Dent, and we believe that it will mature for you earlier than any other Dent corn which you can secure.

Description—It is of the smoothest true Dent type, instead of being rough like the Johnson type of the parent ears. The grain is somewhat harder and has a rather flinty appearance. The stalk is thick but short and the ears are very uniform, both as to height on the stalk and size of ear; the cob is quite small, the kernels are of medium depth.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Silver King

The Great White Corn of the North

Silver King is one of the most useful varieties ever originated. It has been the means of extending the corn growing industry over a greater amount of new territory than has ever been done by a single variety. It was developed by Professor Moore of Wisconsin, who gave it the name of Wisconsin No. 7. It is especially adapted to growing in those latitudes where no other variety of Corn will mature. It has given phenomenal results in Northern Iowa, Minnesota and Wisconsin, and it is a Corn which stands to give a good account of itself wherever planted, for it is an exceptionally heavy yielder, and there is no doubt it has revolutionized the Corn growing industry in the North.

Description—The ears range from eight to nine inches in length, are very uniform in size and type. It is a pure white dent Corn; the ears are filled out well from butt to tip, the kernels are of good length, set compactly in straight rows, and it is early enough to mature in from 100 to 105 days. If you are in the extreme northern part of the Corn Belt you should certainly grow this variety. There is no corn so well adapted to your conditions as Silver King.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Pride of the North

The Great 90-day Corn

This most excellent variety of 90 day corn was originated by Mr. Goddard in Kossuth County, Iowa, and it became at once one of the most popular strains of early corn and as a catch crop to fill in with it has no equal.

This variety of corn does not require the space that larger varieties do and as you can grow four or five stalks to the hill, it is surprising what an enormous amount of corn you will secure from an acre from this variety. It often occurs that this variety planted very late in the season will out yield the larger varieties.

This variety is grown very extensively throughout the northern part of the corn belt and it has proven to be one of the very most popular varieties grown in that section. We can recommend this corn to anyone wishing an extremely early variety, for it is certainly a heavy yielding, strong, vigorous early variety that will give you the best of results.

Description—The ears are of medium size, being about eight inches in length and quite large around in proportion to their length. The kernels are deep and of a rich yellow color and pinched dent. The stalks, although short, are large and very vigorous growers.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Red 90-day or Early Bloody Butcher

This variety of corn is a native to the State of Illinois. It has been carefully selected and kept true to type by some of the best growers in the State and is one of the most popular Extra Early varieties grown.

If you have to replant late in the season we know of no variety that will give you any better results than this White Cap Bloody Butcher, for it seems to have the ability to produce a crop when all others fail and it is surprising what a yield one can secure from this corn even under the most adverse conditions.

Many growers follow the practice of planting a few acres of this corn at the time when the main season crop is being planted, for it produces an abundance of early feed, which can be utilized two or three weeks before the other corn can be fed. As old corn is usually very high in price at this time this variety works into the cropping system very advantageously and often is the means of saving a big feed bill. You should at least grow a few acres of this corn to insure you against a shortage of feed during the late summer.

Description—In color it is cherry red with a white cap. The cob is of medium size and white in color. The ears are from 8 to 9 inches long and usually have 14 rows. The stalks are of medium height and the kernels dented. This variety will make a crop as far north as Minneapolis.

Owing to unsettled conditions we are unable to quote firm prices. See list enclosed.

Early Yellow Dent.

Don't Expect Too Much

Don't expect every ear of seed Corn we send you to be perfect, for it is an impossibility to get such Corn. We are sending you the very best quality of Corn that we can secure and Corn that we feel will give you good satisfaction. Remember that every order we ship you is backed by our Absolute Guarantee.

Extra Early Varieties

We are in a position to take care of our customers very nicely on extra early varieties of corn, as we make a specialty of growing corn especially suitable for growing in the extreme North, where the seasons are so short that they do not permit you to grow the dent varieties, and also for growing in the South, where the intense heat and drouth makes it impossible to grow any of the larger varieties.

We are always in position to take care of our customers who meet with disaster with their corn crop by reason of floods, hails, etc., and always lay in a supply and get it all ready to ship out, so we can meet the rush orders which come in and cover us up late in May and during the month of June, and you cannot conceive of the corn which goes out at this season of the year on telephone and telegraph calls to rush them by express. So if you should need some of these varieties post haste, remember we carry a large stock and can make quick shipments.

Owing to unsettled conditions, see green list for prices.

Minnesota King

This variety of corn is what may be termed a half dent. It is a cross between a flint variety and a dent. This variety can be depended upon to produce a crop and seems to have the ability to produce a crop when all other varieties fail and it can be regarded as one of the hardest varieties of corn known.

Description. The ears are good sized, eight rowed with very broad kernels of an extremely rich yellow color. In appearance this variety is quite markedly distinct on account of its rich yellow dent characteristics. The stalk is of average height with a very heavy root system and ears about three feet from the ground, often producing two and three ears on the same stalk.

Longfellow Flint

This is one of the most popular flint varieties known. It ripens in from 75 to 85 days and is very prolific. It is grown very extensively in the extreme North.

Description. Ears are cylindrical in shape, very long, a color of rich and glossy yellow, weight of seed sixty pounds to the measured bushel. The kernels are large and wide and the cob very small. The stalks average about seven and a half feet in height and the ears about three feet from the ground.

Sanford's White Flint

This is one of the standard varieties of flint corn, ripening in from 75 to 85 days, and is very productive. This variety has given excellent results in Minnesota and the Dakotas and has proven a very popular variety wherever grown, especially for ensilage and soiling purposes, as the stalks are quite leafy.

Early Yellow Flint.

Description. Sanford's White Flint is an eight rowed white variety with ears averaging from ten to twelve inches in length, two to two and a half inches in diameter, cob small, the kernel large and broad. The stalks grow very tall and usually have two to three ears on each stalk.

Our Improved Early Yellow Flint

This variety of flint corn has been bred up by us especially for the purpose of meeting the demands of our customers who are located in such a latitude that they must have a corn which will mature in from 75 to 85 days. This corn is especially adapted to the Northwest and New England States. It is often used here in the Corn Belt for replanting.

Description. Our Improved Early Yellow Flint is an eight rowed flint variety with ears ranging from ten to twelve inches in length and one and a half to two and a half inches in diameter. It is extremely well filled at both butt and tip and the kernels are large, broad and of a very distinct yellow color.

Both Freight and Parcel Post Orders O. K.

Bangor, Mich., April 10.

My order No. 48227 is here all right, both the freight and parcel post. The seed is fine.

MRS. J. B. HOPKINS.

Silver Triumph

This is a pure bred large white variety of flint corn. It is very productive and very early maturing as it matures in from 75 to 85 days. This variety is used quite extensively even in sections of the corn belt where larger varieties can be grown. Because of its early maturing qualities it furnishes early feed at a time when feed is high and scarce and as it is a very prolific yielder can be grown to an advantage for such a purpose.

Description. Silver Triumph is a large white slender ear, averaging around a foot in length. The kernels are broad and thick; it has more stalk than other varieties of flint corn and usually produces two ears on the same stalk. This variety can be planted as late as the first of July in the corn belt and mature a crop. It is especially adapted to the New England States, but can be grown anywhere that an early maturing corn is desirable.

Evergreen Sweet Corn

This is the standard variety of sweet corn grown for fodder purposes. It produces an enormous amount of sweet and succulent forage per acre. It comes on very early and when fed to stock they will consume a stalk and all. For fodder it cannot be beaten as it makes a fodder which is more palatable than the field corn fodder and the stock will clean it up better than any other kind of fodder which can be grown for them.

Popcorn

Popcorn can very often be grown to advantage in a commercial way and no farm is complete without a few rows of this delicious confection; for who does not recollect with pleasure bleak winter evenings enlivened by a dish of delicious popcorn. One of the sacred duties of parents is to provide for the children an atmosphere of gaiety and happiness. Nothing will promote good fellowship in the farm home like allowing the youngsters to grow a few rows of popcorn, that they can pop during the long winter evenings.

Price—25c per lb., postpaid; 25c per quart, your expense. See green list for larger amounts.

GROWING THE CORN CROP

Soil. Probably no other crop is so particular as is the Corn crop with reference to soil, moisture and climate. The most satisfactory soil for growing a bumper crop of Corn is a rich, black loam, rich in organic matter.

Preparation of the Seed Bed. This feature of Corn growing depends upon what kind of land this crop is to be grown upon. In case it is fall plowing it is usually double disked and given a couple of harrowings, and it is ready for the planter or the lister.

In the case of land which was in corn the year before, it is usually double disked, harrowed and plowed, the plow being closely followed by the harrow to work up a fine seed bed. Some still follow the practice of disking their corn, using a lister, but this method is becoming obsolete.

Planting. Corn may be either drilled or checked. Checked corn is the most popular method, three kernels being dropped in a hill, three feet four inches or three feet six inches apart; where the lister is used the corn is dropped in drills fourteen to sixteen inches in the row.

Cultivation. Many methods of cultivation are practiced in growing corn and most any of them are successful if conscientiously carried out. The main fact to keep in mind in the cultivation of corn is to keep the ground moving and see that it is thoroughly done each time and that it is not too long between cultivations so that the ground will have no chance to crack and settle.

Harvesting. Corn is either husked from the field by hand or with the corn husker, or else harvested with a corn binder and placed in shocks from which the corn may be husked by hand, or run through a shredder, fed from the shock with the corn on the stalk, or placed in the silo.

Sudan Grass

The Wonder Crop When All Others Fail

Sudan Grass is undoubtedly one of the most wonderful crops ever introduced into the United States. Sudan Grass was introduced into the United States in 1910 by Prof. O. V. Piper of the United States Department of Agriculture. It was first given a trial at the Government Experiment Station near Chilledoche, Texas, where its ability to withstand protracted drought attracted attention. Since that time it has been grown in all sections of the United States and from all sources come reports of enormous yields of seed and hay. It is, however, in the production of hay that Sudan has won its fame. It often produces 5 tons of hay to the acre which is much superior in quality to the hay produced by other forage crops. All stock relish the hay and thrive on it. The plant stools wonderfully and sometimes as many as 100 stems are produced from a single seed.

Sudan an Easy Crop to Grow

It seems to require no special qualities in the soil. It seems to succeed equally well on black clay or sandy loam. Weather conditions seem to have but little effect on it and it will make a crop despite the most adverse conditions.

We have seen some very wonderful fields of Sudan, not only in the corn belt, but upon the dry lands and in the dry farming districts in Colorado, South Dakota and Nebraska. We have seen it stand out tall and green during the hot, dry summer, when other forage crops were dry and brown. It is undoubtedly the greatest drought-resister ever known, and it has certainly been a blessing to the dry land farmer of the semi-arid districts,

for it has proven one of the best and most nutritious feeds for live stock which can be grown in any climate and we regard it as the greatest crop that can be grown on any farm.

We have grown this great dry weather crop upon our own farm, and are in a position to know just exactly what we are talking about when we tell you that it is the greatest crop ever grown. We are enthusiastic about it, and we know if you sow Sudan Grass once you will sow it every year, for it fills the bill as a silage, as a dry feed or as a soil crop, and you cannot afford to not grow at least a few acres, no matter how small your farm.

Side Lights on Sudan

One acre will graze 5 work horses at night and they will want but little other forage. Six acres will feed 5 head of cattle over the dry summer months when pastures are dry and brown. Three acres will feed six milk cows. An acre of Sudan produces nearly twice as much protein as an acre of clover. Five acres of Sudan will produce 25 tons of the most nutritious hay you have ever fed.

Sudan the Solution of the Hay Problem

There never was a time when hay was such an item to the farmer as at the present time. There is always a demand for hay and we know of no crop that will produce the amount of hay that you can secure from an acre of Sudan. One County Agent advises "Plow up 80 acres of meadow, sow 25 acres of it to Sudan and you will have more and better hay than you have had before and have 55 acres to put to corn."

A Catechism on Sudan Grass by a Leading Authority

Q. What is Sudan grass anyway?

A. It is an annual plant of the sorghum family, supposed to be the parent type of all the sorghums. It is an annual, dying when winter comes. It looks like sorghum, but is much more slender, more leafy, finer stalks, and stools like wheat.

Q. What is it good for?

A. It is grown for stock feed, and can be either cut and fed green or cured as hay.

Q. Will stock eat it, and is it good for them?

A. All kinds of stock eat it readily, and it is especially good for horses, mules and cattle, in fact a better feed than any other hay except alfalfa.

Q. How is it better than corn, or kaffir, or millet for fodder hay?

A. It is richer feed than either, makes more leaf and less stalk than either cane or kaffir, cures easily, and will not sour or spoil like cane so often does. Besides it will make a crop on less moisture than any other crop known.

Q. Where will it grow? Can it be grown in the North, on thin land?

A. It will grow anywhere that field corn, cane, milo, or kaffir can be grown, and besides will thrive where it is so dry that none of these can be grown.

Q. What are the objections to it?

A. None so far as anyone has been able to find out yet.

Q. How should it be planted, drilled or broadcast and why?

A. The best way to plant it is to drill it in rows corn row width and cultivate like corn. This takes from two to five pounds of seed per acre. Many people, in order to save the work of cultivating, sow it broadcast or drill it with a wheat drill, using about 20 pounds of seed per acre, and handle it with a grain binder.

Q. How does it yield? Will it yield more than other fodder or hay crops?

A. It will yield two or three times as much as either cane, kaffir, milo, or millet and make far better feed.

Kaffir produces heavy yields of the most succulent forage. It can be grown on almost any soil and in most any climate and is the solution for the Feed Bill Problem on every up-to-date farm. Its hardiness makes it a very valuable forage crop.

Cane Seed

Cane is without doubt one of the greatest producers of high quality forage which has ever been discovered. The West has learned to appreciate the wonderful qualities in this great forage crop, but the East yet has much to learn about it, for they have not learned to take advantage of this most excellent plant for producing their silage and fodder.

The cane plant produces from three to eight tons per acre of cured forage and it may be grown from Canada to Mexico and it will withstand drouth and other unfavorable conditions that would mean death to any other crop.

Many are prejudiced against this crop because of fatalities among livestock which they have heard of from time to time and many of which were made out of whole cloth or grossly misrepresented. It is true that cane under certain conditions has proven poisonous, but such cases are so rare that they are very nearly a negligible quantity. Many make a practice of cutting cane two or three times during the summer, but we prefer to sow the cane quite thickly so that it will not grow so rank and coarse and then cut it just after the first light frost, and we have found that on our own farms this has proven to be the most satisfactory way of handling cane both for ensilage and for fodder. The variety used for fodder is slightly different from the variety used for syrup purposes, as the stalks are somewhat more slender and more easily cured.

The Early Orange Top Cane Seed

This variety is somewhat later than the early Amber, but it is a very heavy producer of foliage, and because of this fact, and that it is thought by some to be more drouth resistant than the other varieties, it is in more demand throughout the South and Southwest, but for the farmer in the corn belt and Eastern States we believe that the Early Amber will give the best results.

Owing to unsettled condition of the market we ask you to refer to price list enclosed.

Early Amber Cane Seed

The Early Amber is the most common variety of Cane grown; there are two ways of planting it; one is by broadcasting, sowing from one to two bushels per acre, the other is to drill with a corn planter and cultivate the same as you would corn. It can be grown on any soil or in any climate from Maine to California. It will thrive on the richest land you have, or on the poorest, and it is one of the greatest destroyers of obnoxious weeds in existence. It can be sown any time from April to July and be harvested any time between the time it is a foot high and the first freezing weather. Try a little cane this year; you will be surprised at the wonderful results you will secure from it.

Owing to unsettled condition of the market we ask you to refer to price list enclosed.

Kaffir Corn

This is, without doubt, one of the most valuable fodder crops for the Western and Southern States. It is quite drouth resistant and is valuable both for fodder and grain and many farmers in the Southern States are using it for ensilage in preference to corn. In the Southern and

Western States it is sown in rows and cultivated the same as field corn, but in the corn belt states it is usually sown broadcast at the rate of from 75 to 100 lbs. per acre, and when handled in this way, it produces excellent forage, as the stems are small and fine.

In the southern part of the corn belt and throughout the great Southwest it is the principal grain crop grown. Many fields often produce at the rate of 50 bushels per acre. It is an excellent food for poultry and no farmer should be without at least a few acres for this purpose alone.

Our seed stock has been secured from a section where special efforts have been made to produce not only the highest yield of grain per acre, but also to produce the maximum amount of high class forage. Special care has also been taken with our seed stock to preserve its germination, and since Kaffir Corn loses its germinating qualities more quickly than any other seed when not properly handled, you should make sure that your Kaffir seed comes from a reliable source.

Owing to unsettled condition of the market we ask you to refer to price list enclosed.

Feterita

This is a new grain which has recently been introduced by the United States Department of Agriculture from Egyptian Sudan, and it has proven one of the greatest blessings to the farmer in drouth stricken regions that has ever been introduced.

It very much resembles the Kaffir plant in appearance, but the heads are more blocky and it is a much bigger yielder of grain. The seed very much resembles that of Kaffir corn, but is of a pearly white color. It is very much earlier than Kaffir corn and has been grown very successfully after a crop of Kaffir or field corn has been destroyed and it was too late to plant either of them again. One seed often produces from six to eight shoots as it stools very heavily; for this reason you should not sow as thick as Kaffir corn. It may either be sown in drills or broadcast, but in most cases it is sown in drills and cultivated. Very astonishing results have been obtained with this great grain crop in Oklahoma. It is one crop that will beat the hot winds and drouth.

The feeding value of Feterita as a grain or as forage is equal in every way to Kaffir, many prefer the grain to that of Kaffir corn because of it being softer and not requiring grinding before feeding.

Owing to unsettled condition of the market we ask you to refer to price list enclosed.

Russian Flax

This is the variety almost exclusively grown in the Northwest. Our seed has been grown on clean, new land and it contains no mustard. Although you can secure Flax seed almost anywhere in the Northwest, Flax seed containing no mustard is hard to get, for the reason that but few seedsmen are equipped to clean mustard from Flax, and even in case they are, it is an expensive process, and large quantities of seed are sown containing mustard, which is in a large measure responsible for this pest becoming so prevalent.

PRICE—At the time of going to press the market is in a very unsettled condition, and we are going to ask you to kindly write us for prices before buying.

Milo Maize

Next to Kaffir Corn, Milo Maize is probably the best known of the grain sorghums. It grows larger heads and produces a slightly larger grain, the heads are slightly drooping and it can be grown with less moisture than Kaffir Corn.

See price list.

Broom Corn

The price of Broom Corn has advanced until it has become one of the most remunerative crops. We are getting some very fine seed from a grower in Oklahoma, who makes a specialty of high grade Broom Corn. It is one of the best paying field crops that can be raised in many localities, and it will certainly pay you to investigate and see if you cannot raise this crop to a profit. Better try a small patch this year, at least enough to make your own brooms, for you can for a few cents get sufficient seed to raise enough corn to make brooms, which if you had to buy them at 50 cents apiece would cost you a nice little sum.

We handle two varieties of seed, the Improved Evergreen and the Dwarf Evergreen.

See price list.

Pencillaria

Pencillaria is a new fodder plant with very heavy yielding qualities, producing a heavy growth of broad dark green leaves, which are very nutritious and resemble very much those of corn. It is a native of Central America and it is claimed by some that if the plant is allowed to grow until the seed is formed it will produce the heaviest crop of forage of any plant in existence.

It should be planted in drills, six inches apart for it stools very much like wheat. It should not be planted, however, until about corn planting time. It should not be covered over a half inch in depth, then cultivate the same as you would corn. It is an enormous grower.

See price list.

Jerusalem Corn

This is a most excellent crop for dry countries and phenomenal records have been made by it under the most adverse conditions. It grows about three feet high, makes one large main head and several smaller ones. The grain is pure white and is good feed for all kinds of stock, and in some of the drouth stricken countries it has been used as human food. It should be sown in drills at the rate of about five pounds per acre and the crop handled in every way the same as Kaffir Corn.

See price list.

CULTURE OF FORAGE CROPS

Soil. While forage crops prefer a moist soil, they will succeed under a wide variation of soil and climatic conditions and may be grown from Maine to California.

Preparation of the Seed Bed. No special preparation of the seed bed is necessary, and although these crops will well repay one for any work put on the preparation of the ground, a good discing and harrowing is usually all that is done to the ground that has grown a cultivated crop the previous year.

Seeding. The rate of seeding is governed entirely by the kind of crop one wishes to grow. If hay is desired, most of these crops are seeded at the rate of a bushel and a half to two bushels per acre, as the hay will not be as coarse as if a higher seeding is made. When the crops are grown for seed, they are usually planted in rows and cultivated.

Harvesting. When cut for hay, these crops are usually mown, raked and placed in good, rigid cocks and then fed to the stock from the cock. This method saves a great deal of labor and as the crops are not usually harvested until late in the Fall, they are not exposed to much rainfall and the snow does not seem to hurt the feeding value of the crops.

When these crops are harvested for seed they may be either topped with knives or cut with a corn binder and thrashed.

Feeding. These crops may be fed direct from the shock or placed in stacks and hauled to the bunks from the stack. They are also used quite extensively for filling the silo and when used in this way a larger amount of highly nutritious feed can be secured than in any other way.

Caution. The forage crops belonging to the sorghum family should not be pastured or fed green, as at a certain stage of their development they form a poison that is very injurious to all live stock.

Buckwheat, a Very Profitable Short Season Crop.

Buckwheat

Buckwheat is much underestimated by the farmers of the United States today. It is often looked upon as a crop to be sown as the last resort where some other crop has failed or where some particular plot of land has been in such condition that it could not be put in condition to seed until too late for the sowing of any other crop. The real value of Buckwheat is that it may be worked into rotation and used in a two crop system for seeding the land upon which a crop of winter wheat or rye has been grown to this crop late in July or early in August and harvesting a second crop of grain from the land with little extra labor.

Buckwheat is one of the best cover crops that can be grown in the orchard and the flowers are very much relished by bees. Buckwheat is the cool season's crop and one which can be sown very late in the season and will produce very satisfactory returns. It can be handled at a time when other crops are not needing attention and we believe it should be much more generally sown than it is at present.

GROWING THE CROP

Soil. Buckwheat is a rapid, vigorous grower and will do well on the poorer and lighter soils. While it is best adapted to a somewhat sandy, well drained soil it will flourish on the heavier soils and when grown upon heavy clay soil it is said to leave the soil in a very mellow condition.

Seeding and Tillage. The ground should be prepared as for other cereals and it may be either sown broadcast or by drilling, using from a peck to a half bushel of seed to the acre.

Harvesting. As Buckwheat blooms continuously the seeds do not all ripen at the same time, but it is generally harvested in the latter part of September, or the first of October, when the first seed has matured. The grain shatters very badly and great care must be taken in harvesting to prevent the loss of seed. A header or grain binder or mower with a bunching attachment have been used very successfully in harvesting the crop.

VARIETIES

Japanese. Japanese is a variety generally recommended for this section, as it is very productive and succeeds well under Northern conditions. The plant is strong and vigorous and the flowers are not as liable to be injured by the hot weather as the other varieties, and the grain is somewhat larger. Price—See green list for prices.

Silver Hull. The grain is of a light gray color with a thin husk, it is a heavy yielder and very early. It is preferred by the flouring mills to the other varieties because of the high proportion of flour to bran. Price—See green list for prices.

Golden Millet, Often Produces Four or Five Tons of Very Fine Hay.

Millets

Sow Nothing but True Southern Grown Seed

Millets are productive short season annuals, exceedingly useful when other crops fail. Because of this characteristic they have become known as catch crops. In the Northern States Millet is grown almost exclusively for hay, and because of this fact, the Millet seed grown in Northern climes does not produce as fine a quality of hay or seed as the Southern Millets, as they become dwarfed, and crops grown from Northern seed do not become as tall or grow as fine as Millets grown in the South. That grown in the North, even from Southern seed, deteriorates and becomes what is known as Common Millet. The plants not only grow shorter and coarser in character, but the seed undergoes a decided change which is distinguished by experienced seedsmen.

Many unscrupulous seedsmen handle large quantities of this Northern grown seed and place it upon the market as Southern Millet. This practice enables them to make the farmer a price much below that which the reliable seedsmen can make upon the true Southern grown millet, and we wish to caution you against such a situation and emphasize to you the importance of buying your Millet seed only from reliable sources and also caution you against using Millet which has been grown in the North, for although a fair yield can be secured from this seed a crop can be more than doubled by sowing our true Southern grown Millet.

GROWING THE CROP

SOIL—Millet is particularly adapted to new land, and it is being grown under ideal conditions when placed upon prairie sod or newly cleared timber land. Being a coarse feeder it prefers loose, sandy soil to clay.

SOWING—The amount of Millet to sow per acre is about three pecks for hay, and one peck when sown for seed. In the case of the broom corn Millets, the seed is considerably larger and about three pecks of seed should be used per acre. Millet may be sown any time from early spring until late summer, and it is because of this wide variation in the time of seeding that it has become so popular throughout the country.

TILLAGE—Millet, in most instances, is either sown broadcast or with a grain drill, and in such cases requires no tillage, but in some instances when grown for seed it is sown in rows and cultivated. In the case of poor and very weedy soil, this practice is to be recommended.

HARVESTING—The method of harvesting depends upon whether the Millet is to be fed green, used for hay or cut for a seed crop. It is well adapted for soiling purposes and is used as a green feed quite extensively in the East, and in some instances has been utilized as a temporary pasture. When cut for hay, which is the most common use to which Millet is put, it is usually cut just as the heads appear, although some follow the practice of allowing it to stand until the seed is ripe. No definite rules for curing the hay can be given owing to different climatic conditions.

FEEDING VALUE—Millet hay is highly nutritious and is readily eaten by all classes of live stock. As far as chemical composition is concerned it has a slight advantage over Timothy, containing a slightly higher per cent of ash protein and nitrogen free extract, which makes it more desirable for young and growing stock.

GOLDEN MILLET

This variety is very popular in the Central and Southern States. It is far superior to common Millet, both in quality and yield. It grows from four to five feet in height and often makes the splendid yield of four or five tons per acre. It is drought-resistant, and because of that characteristic has become very popular throughout the Southwest. There is no doubt that Millet should be more commonly grown, for it undoubtedly has a large field of usefulness in the Eastern States. In these states it is customary to grow only one crop on one field, but it is possible to grow a winter crop of rye hay and a summer crop of

Millet in most parts of the East, and on farms where all crops are fed, there is no doubt but that Golden Millet, if properly handled, would materially increase the income upon such farms.

It is very necessary in sowing this crop to secure Pure Southern Grown Seed. Our seed is especially grown for us in Tennessee, which State produces the best quality of seed that can be procured. If you are going to be a little short of hay or if you are going to need some green feed to tide you over while the pastures are dry and brown, try a little genuine Golden Millet. You will be surprised at the results. Be sure you secure Southern Grown Seed. It will double the yield of the crop.

PRICES—See green list.

JAPANESE MILLET

This variety of Millet is especially adapted to wet, low grounds, and when grown under such conditions has been known to produce some phenomenal yields, producing large amounts of hay, which is readily eaten by stock. One variety has been exploited under the name of Billion Dollar Grass. It grows to an enormous height; for this reason it should be sown in drills, leaving room for cultivation. When sown in drills use about 10 pounds per acre, but if sown broadcast, sow about 15.

SIBERIAN MILLET

This variety of Millet was imported from Russia, and being somewhat earlier than the Golden Millet, it has been found to be very valuable in the Northern States. It does not grow as rank as the Golden Millet, but produces a very fine quality of hay, and its early maturing qualities make it a very desirable crop to grow as a catch crop. It should be sown at the rate of thirty-five or forty pounds per acre. See price list.

HOG BROOM CORN

Because of the very short season to which it is adapted, this variety of Millet has become very popular in the far North. It is very drought-resistant. Although the stems are much larger, they are not so tall. In recent years it has gained considerable prominence in the Dakota; and adjacent states, and although it does not produce as large a yield of forage, it produces an enormous seed crop, and the seed is very desirable for poultry feeding purposes.

PEARL MILLET

This variety of Millet grows very tall and yields an extraordinary amount of nutritious feed. It should not, however, be allowed to reach over three or four feet in height before cutting. It will then furnish continuous croppings for either soiling purposes or hay. It is a wonderful crop for use on the dairy farm. Price, 15c per lb.

COMMON OR NORTHERN MILLET

This variety of Millet does not yield as good a quality of hay or as much per acre as does the Golden Millet, but is very much cheaper in price than the true Golden Millet, and we have a lot of seed that is as near perfect in quality as we can secure of Northern grown seed, and while we do not advocate the use of this variety, we handle it to meet the demands of the grower who wishes to secure the cheaper quality of seed. See green list for latest prices.

HUNGARIAN MILLET (Dark Seed)

This variety is somewhat earlier than the true Golden Millet and is very popular in the Eastern States, where seasons are shorter and drouth is not so common as in the West. It makes large yields on good soils in most seasons. See list for prices.

Our Annual Pasture Mixture Produces an Abundance of Feed for All Classes of Live Stock.

Rape

Though only of comparatively recent introduction, Rape is now considered one of the most valuable of forage crops. If you have never tried Rape, be sure and sow some now. It is the greatest late season crop that can be grown. It may be sown any time from early spring until August, and may be sown on nearly every available soil in the United States and Canada. Rape sown in corn at the last cultivation will produce a growth of the most succulent and palatable forage of from fifteen to twenty inches in height. Rape thrives best in cool weather and will produce an abundance of forage, even after hard freezing weather commences.

Rape is especially relished by hogs and sheep and some phenomenal returns have been secured from pasturing hogs and sheep upon rape, and the Iowa Station has shown by a series of experiments that from four to six dollars per acre can be made from rape with hogs and sheep.

The Iowa Station has produced sixty bushels of oats and eighteen tons of rape, the oats and rape being sown together in the spring. The rape did not interfere with the harvesting of the oats and it afterwards produced eighteen tons per acre.

Advantages Derived from Growing a Crop of Rape

1. You can secure two crops from the same land.
2. It produces pasture weeks after all other forage plants have been killed by frost.
3. Is the greatest forage for sheep that can be grown.
4. A better finish can be put on a lot of hogs when being pastured upon Rape than by pasturing on any other crop.
5. Rape can be sown at the cost of about 30 to 40 cents per acre, and no other such an amount of green feed can be produced for as small an outlay for seed.
6. Rape is succulent, nutritious, palatable food for all stock.

Rape One of the Most Profitable Crops You Can Grow

As land becomes more and more valuable, new methods are constantly being devised which will increase the yielding power of an acre of land and yet not rob it of its fertility. Rape meets a long-felt want in this respect, for it is not only possible to secure a crop of small grain or corn upon the land, but it is also possible to grow an enormous quantity of the most palatable and succulent forage upon the same land, and by pasturing off the rape, no ill effects on the land will be caused, as practically all of the fertility is returned to the soil.

The value of a pasture for hogs has long been demonstrated as the most economical way of producing pork. Regardless of this thousands of herds of hogs throughout the corn belt are produced yearly without ever being allowed to graze for a single day. This is due to the supposed difficulty of providing good pasturage for them; but where so excellent a pasture crop as rape can be produced so abundantly and so cheaply, it is an awful waste to produce hogs in this manner.

We are making very low prices on Dwarf Essex Rape, considering the expense of importing it from Europe. The market conditions of this seed are rather unsettled abroad at present but we were very fortunate to secure our stock just when we did. Rape is a crop where the quality of the seed is important. Be sure you get our samples and prices.

Price—Postpaid, 25c per lb. Your expense, 5 lbs. or more, 18c per lb. Ask for prices on larger amounts.

Our Annual Pasture Mixture

This pasture mixture has been prepared with the idea of producing the greatest amount of green feed in the least possible time. It is especially suitable for sowing in feed lots, vacant places on the farm where other crops have failed or where you were for any other reason unable to utilize this space.

This pasture mixture meets a long felt want for a crop which will produce an abundance of green feed when the pastures are bare and brown. You may think you have plenty of pasture for all your stock and would have under normal conditions, but some unforeseen circumstance arises, as it always does at some season of the year, and you find you are short of feed. Here is where our pasture mixture will repay you many times its cost. It is the best Pasture Insurance you could have.

There is no better catch crop than our American Pasture Mixture, for it can be sown in July or August after a crop of Rye, Winter Wheat or Barley has been removed, and will produce an abundance of green nutritious feed throughout the late summer, fall and early winter months, at a time when pastures are cropped short and you would have to be feeding your cows, pigs, sheep and cattle high priced grain which you can just as well save and turn into cash, and at the same time be furnishing your stock with a more nutritious feed than you possibly could from the granary or the barn, and send them into winter quarters in much better condition than upon high priced feed stuffs.

Our Annual Pasture Mixture is made up of seeds producing plants that are annuals only. This mixture has been carefully re-cleaned and is free from noxious weeds, and all impurities of every kind whatever, and we are especially anxious to have you at least sow a small patch of this combination of the more vigorous growing, productive and most palatable annuals known, and we feel sure that it will be the means of solving your pasture difficulties for you. We do not believe any farmer can afford to be without at least a small patch of mixture.

Price—Your expense, 10 lbs., 75c; 25 lbs., \$1.50; 100 lbs., \$5.00.

THE CULTURE OF RAPE AND OUR ANNUAL PASTURE MIXTURE

These two crops can be used in much the same way and succeed under about the same conditions and for this reason we are giving you one method of culture that we believe will cover both crops.

SOIL—These crops will grow on nearly any soil but prefer rich black loam.

PREPARATION OF THE SEED BED—No special preparation of the seed bed is needed. Rape may be sown in connection with some other crop or as a catch crop after some crop has failed or sown in the corn at the time of the last cultivation. All Annual Pasture Mixtures may also be sown in the corn or as a catch crop but most frequently it is used to secure a quick rapid growing pasture on some farm where there is an insufficient supply of pasture grasses.

SOWING—These crops may be sown any time from early spring until mid summer and while rape only requires from 5 to 8 pounds of seed per acre we advocate sowing 40 to 50 pounds of the Annual Pasture Mixture. When seeded with these amounts of seed the land furnishes an enormous amount of pasture and a cheap lot of feed can be grown. These crops are especially adapted for pasturing sheep and hogs and we know of no way by which as large an amount of pasture can be secured in a short time as by using either our Annual Pasture Mixture or Rape.

Potatoes

Our stock of seed Potatoes is grown almost exclusively in the Red River Valley of Minnesota and North Dakota. This district produces the best seed Potatoes which can be grown anywhere in the world. The big Potato growers of the United States have discovered that they can do nothing which will pay them better than to secure seed Potatoes from this district. These Northern grown seed Potatoes seem to have the life, quality, vigor and growth necessary to the production of a high class crop of tubers. A crop grown from Northern grown seed will outyield a crop grown from seed secured from any other section.

How Our Seed Potatoes Are Grown and Handled

We contract with the large growers in the North to grow so many acres of Potatoes for us, especially for seed purposes. This seed is clean, healthy and free from scab, and we in this way secure the best quality of seed Potatoes which can be produced. In the fall we ship in several cars to our frost-proof warehouse in order to be able to supply the early Southern trade, but the big bulk of our Potatoes are left in the North, where, being stored as they are under ideal conditions, they reach us in March, solid and dormant, and in much better condition to send out to our customers than if we shipped them down from the North early in the season, for it seems that Potatoes not only grow to the highest state of perfection in these far Northern States, and are able to transmit this quality to the succeeding crops, but they keep much better in the earthen cellars, especially constructed for the purpose than in any artificial warehouse which we might construct from stone, brick and concrete.

All Our Seed Carefully Hand Sorted

All our seed Potatoes are carefully hand sorted from carefully selected stock, such as you will not secure from any other source, and we feel that we haven't the words at our command to place before you in language strong enough to really do justice to the exceptional quality of seed Potatoes which we are able to offer you.

We Are Not Introducing Questionable Varieties

All of the seed Potatoes which we are offering you are standard, well known varieties, and we are not placing before you some new and unheard of sports which have made some phenomenal yields or grown to an enormous size. We are simply placing before you for your careful consideration the best lot of Northern grown seed Potatoes of old, well known, reliable varieties, which we have been able to produce under ideal conditions of soil, climate and tillage. I believe we are able to offer you the greatest values in Northern grown seed Potatoes which you have ever been offered.

How Our Seed Potatoes Are Shipped

We ship our seed Potatoes any way our customers desire, but our list price is based on bags being used in shipments. Should you wish to have your Potatoes sent in barrels, add 10 cents per bushel to cover the extra cost; if in one and one-half bushel baskets, add 15 cents a bushel. A bushel of potatoes cannot be placed in a bushel basket, or 60 pounds of Potatoes to the bushel, and we are forced to make shipment of a bushel in one and one-half bushel baskets. Some firms offer Potatoes in these measured bushel baskets, and in ordering the seed Potatoes this fact should be taken into consideration, as a bushel of Potatoes by weight cannot be placed in a bushel measure. This method of shipping in baskets is very satisfactory and the seed Potatoes usually arrive in excellent condition, while those shipped in bags are always more or less skinned, and when shipped in barrels it necessitates paying the freight on 20 or 30 pounds for the container.

Date of Shipment

While we ship Potatoes to you any time you order them shipped, it is very risky to have them shipped before April 1st, as we do not take the risk of their freezing until that time, but if you wish them shipped sooner and you take the risk we will make shipment for you. We ship large quantities of Potatoes by express and small quantities by mail before this time, but we do not take the risk of their freezing by freight until we are confident the weather is safe, so when no special instructions are given to the contrary we hold your order until in our judgment there will be no danger from freezing in transit.

A Word About Prices

At the time of going to press the market is in a very unsettled condition and it is an impossibility to accurately estimate the values, but at the time of mailing we will enclose you our green list, which will give you the latest quotations.

Early Ohios Are a Good Variety of Potatoes to Grow.

To those who order seed Potatoes in large quantities take the matter up with us before ordering so that we can keep you posted on our best prices. Kindly mention the number of bushels and variety wanted when inquiring for special prices.

Varieties

RED RIVER EARLY OHIO SEED POTATOES

The growers in the Red River Valley of North Dakota and Minnesota have specialized on the Early Ohio for many years, and they have developed it to the highest state of perfection. No finer seed can be found anywhere than this Red River grown Early Ohio, for the growers in that district have put their best efforts forth and by careful selection of the seed stock, careful methods of cultivation, and the experience in handling the crop which, following the business for a generation has made possible. They have produced a variety which is undoubtedly without an equal for smoothness, uniformity and typical shape.

The Early Ohio Potato is so generally known that it requires no extended description. It is more popular than any other variety, as shown by the greater number of sales for seed stock. The Early Ohio can most always be depended upon to give a satisfactory yield, for even in localities where climatic conditions are not suited for the production of a late season crop of Potatoes, the Early Ohio can be planted early and will develop before the hot, dry weather begins. Taking the country over, there is no Potato which meets with such universal satisfaction as does the Early Ohio, and this extra selected seed stock which we are offering you is the best that can be secured. It will ripen a week earlier than your home grown Early Ohios, and will produce a much larger yield, of smoother, larger-sized Potatoes. This seed stock is free from scab, dry rot and other diseases so prevalent among Potatoes grown farther south. Every bushel is backed by our Absolute Guarantee and if not perfectly satisfactory return them and your money is waiting for you.

WHITE OHIO POTATOES

This is a seedling or sport of the Red River Ohio. It is very similar in every way, except that it is different in color, being pure white with pink eyes. This variety is not grown as extensively as the Red River Ohio, and we only have a limited stock to offer you, so kindly place your order at as early a date as possible, as there will undoubtedly be orders received that we will be unable to fill, as this new strain is becoming very popular.

EARLY SIX WEEKS

This Potato is a dark, brownish pink in color, is of medium size, oval and slightly flattened in shape, skin is smooth with a few netted spots at one end, eyes of medium size and shallow. This variety has proven very popular, especially for the South where it necessitates the production of a Potato which will develop early in the season and escape the dry, hot weather. Because of the vigorous growth which it makes, and the earliness with which it matures, the Early Six Weeks has proven a very popular Potato for the early season crop. Our stock has been carefully selected for early maturing qualities, and we have some exceptionally nice Potatoes of this variety to offer you.

We are unable to quote firm prices. See price list enclosed. Good for month in which issued.

One of the Best.

EARLY ROSE

This variety has been a great favorite for many years, and many growers claim it has never been excelled in quantity and productiveness. It cooks up mealy, and is of a very fine flavor. It is light pink in color, rather elongated in shape and of good size. This is one of the earliest varieties of Potatoes that can be grown, and we wish to recommend it for your early season crop. Grow some of these fine tubers and have new potatoes while your friends are eating old ones. Our seed stock has been grown in the Red River Valley, and we feel sure that we are in a position to offer you some great values in this variety.

THE IRISH COBBLER

The Irish Cobbler is a medium early maturing Potato. They are increasing in popularity among the best Potato growers, especially among market gardeners. This variety is grown very extensively throughout the South and in some sections is being grown to the exclusion of all other varieties. When this variety was first introduced, no special claim was made for it as an early maturing variety, and it was rather regarded as the main season crop. They have, however, on account of being grown extensively in the North, and because of the fact that the seed stock has been selected for the purpose in view of promoting its medium early maturing qualities, until today it may be considered as one of the medium early maturing varieties.

Description—The Irish Cobbler is round and uniform in size and shape, and of a creamy white color. The flesh is white and of fine quality and flavor. It is especially noted for its heavy yielding qualities, and this characteristic together with its general thriftiness and ability to stand adverse conditions such as rust, blight, etc., makes it a very superior variety and one which will meet with the approval of the grower at digging time.

RURAL NEW YORKER

Rural New Yorker is the standard main season crop. It is very distinct and a valuable late crop variety. It makes a heavy, healthy, vigorous growth and attains a very large size. The tubers are very solid, and it is a very heavy yielder. It is quite drouth resistant, and for a main season crop and one which will keep until new Potatoes come, it cannot be beaten. This is a variety that will produce a big yield for you.

RED ROSE

Red Rose is a medium late variety, elongated in shape and very large and is an excellent yielder. It is a great Potato for localities with a short season. It is very hardy, making a strong, vigorous growth. It is not subject to blight or scab. For a Potato maturing rather early, and yet not an early Potato, we can most heartily recommend the Red Rose, for it is a high class variety in every respect.

Potato Eyes by Mail

To those who only grow a small lot of Potatoes, a very convenient way of securing seed without paying freight or express charges on small quantities is to secure the Potato eyes. We are offering this advantage of your being able to secure the Potato eyes without having any express or freight charges to pay.

Realizing that it is just as important for the small grower to be able to secure Northern grown Potatoes as it is for the large grower, we have carefully prepared Selected Eyes from our very choicest stock, and are offering them to you so that you can secure a new start of a desirable variety without much expense.

These can be sent without much danger of freezing. A customer can secure them early without taking any risk. By our method of preparing the eyes for shipment, they will keep in good condition for many days before planting. We guarantee safe arrival in good condition.

In planting in hills, allow three or four eyes to each hill; if in rows, drop eyes about eight or ten inches apart. These eyes are packed in boxes, which have been plainly labeled, and they mean a great saving to our customers who are so far away that their express and freight rate would be an item of expense.

PRICE—Eyes of any variety listed, 25 eyes, 30c; 50 eyes, 50c; 100 eyes, \$1.00; 300 eyes, \$2.50; 500 eyes, \$4.00. Special—100 eyes of 3 varieties, \$2.50. All postpaid anywhere in the United States.

GROWING THE CROP

SOIL—The ideal soil for a crop of Potatoes is one so light as to offer no great resistance to the enlargement of the tubers, and so well supplied with organic matter as to be rather moist without being wet. It should be so rich as to furnish an unfailing supply of fertilizing ingredients.

PREPARATION OF THE SEED BED—Although a Potato requires a rich soil, it is more important to have a soil which is in proper mechanical condition than it is to have the natural fertility. The success of the Potato is largely dependent on the crop preceding. A very satisfactory method of handling the Potato ground is to plow under a crop of some leguminous plant the fall preceding. This furnishes the organic matter and adds to the store of available nitrogen so necessary in the production of a Potato crop. The main feature to be followed in the preparation of the seed bed for Potatoes is to avoid compacting the soil as much as possible. The land should always be plowed deep and a mulch maintained at all times to maintain the moisture content.

PLANTING—The rows should be laid off as close together as possible without interfering with horse cultivation, and the seed pieces should be dropped in furrows seven or eight inches deep made by use of a single shovel or some such similar tool. The pieces may be dropped by hand in the open furrow or the Potato planter may be used, dropping and covering the seed pieces at one operation. The time of planting varies with different localities and with different varieties. The general rule to follow is to plant at such a date as to bring the stage of growth during which the tubers are rapidly developing at a time when there is ordinarily an adequate supply of moisture. Many experiments have been made to ascertain the best depth for planting, and it has been found that planting to the depth of four inches has given the best results. The amount of seed necessary for an acre is anywhere from 12 to 15 bushels, but the amount of seed required varies according to the ideas of the grower with reference to what size the seed should be cut.

CULTIVATION—Potatoes are usually cultivated four or five times, giving the last cultivation just before blooming. The last cultivation should not be too close to rows nor too deep as the Potatoes have begun to form.

HARVESTING—Potatoes that are grown on a large scale are harvested by means of a Potato digger, but the practice among the smaller growers is to either plow them out and pick them up by hand or else throw them out by means of a lister.

MARKETING—Potatoes are usually marketed through a commission firm, but in recent years Potato growers' associations have been organized. Where these organizations are located the farmers handle their own crop and secure good prices for them.

Seed Potatoes by Mail

Nice, smooth, medium Seed Potatoes of any of the varieties listed, by mail, at 20c per lb.; 3 lbs., 50c.

HERE AT LAST!

DROVERS DAIRY FEED

THE FEED YOU CAN AFFORD

Occasionally a real money making proposition is offered to the American farmer that has merit and deserves his honest consideration. Out of the many, many commodities that are offered nowadays, few, if any, ever make as much for the farmer as they do for the promoters. Extensive advertising has done much to create demand and popularity—and advertising all costs money. It must come back some place and the customer usually brings it back in the way of high prices.

Here is a Dairy Food, true to its name, that offers you a real money making and money saving opportunity. It means a big saving to you. It is a Dairy Food that you will not find advertised outside our own modest efforts in our regular mail to you. It needs no promoting. It needs no clever advertising campaigns to push it on the market. It is just as good as any dairy food can be—only it is sold direct to the user at the lowest wholesale price.

What Drovers Dairy Food Is

You will find most dairy foods alike in some respects except the advertising that is created to sell them. Every manufacturer has a different true story to tell—but the foods are mostly the same. Drovers Brand is not the only one—it's just one of the many. It is like all other good grades as far as palatability, milk making and body building are concerned, and it is made by us and sold direct by us under our same unchallenged guarantee that has made the American Mutual Seed Company famous for fair trading.

Guaranteed Analysis Drovers Dairy Food

Protein, 18%
Fat, 4%

Fiber, 10.5%
Ash, 6%

Don't Take Our Word, Take Your Own Test

A sure way to find out for yourself just what this food will do for you, is to get a supply and give it a test. After you have been convinced that it is a real feed then you will adopt it as a standard feed for your cows, coming direct to you from the manufacturer at prices that will surely mean a great saving during a year's time. The more "Drovers Dairy Food" you use, the more you save all around. You will find it just as good as most dairy foods, only it is sold direct to you less the high cost of advertising and dealers' profits.

The next time you buy Dairy Food be sure to get Drovers Brand. It means very little effort on your part to buy direct by mail, but it certainly does mean a great big acceptable saving that surely will make you all the more satisfied with your trading. You are entitled to the direct user prices, why not take advantage of them? Why not buy Drovers Dairy Feed?

Drovers Dairy Feed offers you all that any other dairy food can give, and an extra saving in the first cost.

Price—Owing to present market conditions and owing to the fact that this product is sold on a very close margin, we refer you to our green list for quotations.

Suggestions for Ordering

Use the Order Sheet and printed envelopes. Will be pleased to furnish you extra sheets at your request.

Always Keep Copy of Order—Sign your name plainly and be sure to give your post office, county and state. If your freight or express office has a different name, do not fail to give it also.

Terms Cash—We are reliable; you can send your remittance by P. O. order, Bank Draft, Express Order or Registered Letter.

Seeds by Freight or Express—We secure for you the lowest freight or express rate, and you pay the charges on receipt of the goods. We have a big advantage in saving our customers money on transportation charges when goods are shipped. We send shipping notice and bill of lading of freight shipments, signed by the agent, showing the goods were delivered in good condition.

Prepaid Railroad Stations—If your own station has no agent and is merely a milk or flag station, it is important that shipment be sent to the nearest station that has an agent. This will protect you from delay. Shipments are held when billed to a prepaid station unless freight is fully prepaid and should we find your station a prepaid point, we reserve the right to bill shipment to the nearest station that has an agent. If it is a great convenience for you to have shipment sent to prepaid station, and you do not know the exact amount of freight to include with your remittance, if you guarantee the transportation charges, we will prepay the freight and mail you a bill for the same. We would urge you not to have shipments sent to prepaid stations, as the railroad company is not liable after shipment has been taken from the train.

Important—It sometimes happens, though very seldom, that an order is lost in coming to us; or the goods in going to the customer. If you do not hear from us in a reasonable length of time after ordering, send us a duplicate order, naming the date on which the order was sent, the amount of money enclosed and in what form remittance was sent. We will then investigate the matter and if we find that the order has not already been filled, the duplicate order will go forward at once.

Special Express Rates—Seeds of all kinds take a much lower express rate than regular merchandise. The charge on seeds is one-fourth less than the charge on other merchandise. Express does not have to be prepaid as the amount is the same whether paid at this end or at your express office. You can have shipments up to 30 pounds or 40 pounds sent as cheaply by express as freight with a few exceptions. Seeds are carried at Second Class Rate. If your shipment consists of several bags, you are entitled to the same rate on the aggregate weight, just the same as if it was made in one bag. Unless we notify you, we always deliver the entire shipment to the express company at the same time. Call this matter to the attention of your express agent.

SUBSTITUTIONS

Our rule is not to substitute unless we are given permission to do so. We would suggest, however, that customers name a second choice, in case we are out of the variety ordered. We are amply provided with large quantities of everything on the list, but may run short on some before the season is over, as the demand for certain articles is frequently larger than we could anticipate.

We Guarantee Safe Arrival

We fill all orders promptly and guarantee safe arrival of all shipments. If you do not specify which way to send your seeds, we use our best judgment. Sometimes an express order, and in that case we file claim for our customer and refund the money or refill the order if desired. Be sure and have the agent make a notation on paid expense bill for the amount of the loss or damage, and mail the same to us.

Freight Rates

Don't let freight charges worry you, because whether you buy from us or your home dealer, you pay the freight and you pay no more than your local merchant. Seeds and grain are carried at third and fourth class rates, which are much cheaper than merchandise, so don't let a little freight stand in the way of your ordering. Up to 100 pounds you pay the freight for 100 pounds, whether you have 10 pounds or 100 pounds. Over 100 pounds, you pay only for what you get. For example: if 100 pounds cost you 60c for freight, 120 pounds would cost you only 72c. If your order does not amount to 100 pounds, try to induce some of your neighbors to order with you.

Parcel Post Information

If you want your order to come by Parcel Post always include the postage charges with your remittance. The map on this page shows you what zone your post office is in from Chicago. If in doubt, ask your postmaster or carrier. The table below gives the charges on various weights to the different parcel post zones. In addition to the rate below, the war revenue bill requires a tax of 1c for each twenty-five cents of postage or fraction thereof, on packages bearing 25c or more postage.

Table of Rates for Parcel Post Shipments

Weights of Packages	1st Zone	2	3	4	5	6	7	8
1 pound	.05	.05	.06	.07	.08	.09	.11	.12
5 "	.09	.09	.14	.23	.32	.41	.51	.60
10 "	.14	.14	.24	.43	.62	.81	1.01	1.20
15 "	.19	.19	.34	.63	.92	1.21	1.51	1.80
20 "	.24	.24	.44	.83	1.22	1.61	2.01	2.40
25 "	.29	.29	.54	1.03	1.52	2.01	2.51	3.00
30 "	.34	.34	.64	1.23	1.82	2.41	3.01	3.60
35 "	.39	.39	.74	1.43	2.12	2.81	3.51	4.20
40 "	.44	.44	.84	1.63	2.42	3.21	4.01	4.80
45 "	.49	.49	.94	1.83	2.72	3.61	4.51	5.40
50 "	.54	.54	1.04	2.03	3.02	4.01	5.01	6.00

CAUTION—ORDER EARLY

American Mutual Seed Co's. Planter's Reference Table and Index

	Quantity Per Acre	1 lb. Per Bu.	Page		Quantity Per Acre	Lbs. Per Bu.	Page
Alfalfa	12 to 15 lbs.	60	10	Lespedeza	15 lbs.	24	8
Alyske	6 to 8 lbs.	60	9	Meadow Fescue	1 bu.	24	23
Alyske and Timothy	12 to 15 lbs.	45	24	Millet, Golden and Hog	1 to 3 pks.	50	43
Parley	2 to 2½ bu.	48	32	Millet, Hungarian	1 to 3 pks.	48	43
Ruckwheat	½ bu.	52	42	Millet, Japanese	12 to 15 lbs.	30	41
Blue Grass (Kentucky)	2 bu.	14	23	Milo Maize, Broadcast	1½ bu.	50	42
Blue Grass (Canadian)	2 bu.	14	23	Milo Maize, Drills	6 to 8 lbs.	50	42
Blue Grass (English)	24	23		Meadow Mixture	1 to 2 bu.	26	
Permuta Grass	5 to 6 lbs.	24	23	Oats	2½ to 3½ bu.	32	28-31
Broom Corn	12 lbs.	22		Orchard Grass	3 to 4 bu.	14	22
Broom Corn	8 to 10 lbs.	46	42	Pencillaria, in Drills	4 lbs.	50	42
Clover, Med. Red and Mammoth	8 to 10 lbs.	60	7-8	Pasture Mixture, Annual	30 to 40 lbs.	50	41
Clover, Crimson	10 to 15 lbs.	60	8	Pasture Mixture, Permanent	15 to 20 lbs.	50	46
Clover, White or Dutch	6 lbs.	60	8	Potatoes	13 bu.	60	45-46
Clover, Alyske and Timothy	12 to 15 lbs.	45	25	Popcorn	2 qts.	56	39
Clover and Timothy, Mixed	12 to 15 lbs.	45	25	Red Top (Solid Seed)	8 to 10 lbs.	24	22
Corn	1 bu. 6 acres	56	36-39	Rape	5 to 6 lbs.	50	44
Cane, Broadcast	1 to 1½ bu.	50	41	Rye	1½ bu.	56	34
Cow Peas	1 to 2 bu.	60	18	Soy Beans, in hills	1 to 1½ pks.	60	16
Canadian Field Peas	1½ to 2 bu.	60	19	Sudan Grass, in rows	4 lbs.	50	40
English Rye Grass	2½ bu.	24	23	Sudan Grass, in drills	12 to 15 lbs.	50	40
Emmer or Speltz	1½ to 2 bu.	40	33	Sweet Clover (hulled)	12 to 15 lbs.	60	14-16
Flax	½ bu.	56	41	Sweet Clover (unhulled)	30 lbs.	30	14-16
Feterita	8 lbs.	50	41	Sweet Corn, drills	1 bu. 6 acres	46	39
Italian Rye Grass	2 bu.	14	23	Sweet Corn, broadcast	2 bu.	46	39
Jerusalem Corn, Broadcast	1 to 1½ bu.	60	42	Timothy	10 to 12 lbs.	45	20-21
Kaffir Corn, Broadcast	1½ bu.	50	41	Tall Meadow Oat Grass	2 to 2½ bu.	10	23
Kaffir Corn, Drills	6 to 8 lbs.	50	41	Vetch	1 to 2½ bu.	50	19
Lawn Grass Mixtures	2 to 5 lbs.	26		Wheat		60	34

Sweet Clover

It makes two tons of feed grow where only one grew before.

It's the Big Cash Crop of the Modern Farm

Sweet Clover is a Great Money Crop.

Sweet Clover a Great Money Crop

Sweet Clover is one of the greatest money crops which can be produced. The second year you secure a crop of hay, and a crop of seed which is unquestionably the greatest revenue producer that can be grown. Sweet Clover invariably yields from four to eight bushels per acre, which is equivalent to fifty to seventy-five dollars per acre, and when you take into consideration that you have also secured on the same land a hay crop which at a very conservative estimate is worth twenty-five dollars per acre, besides a quantity of early pasture and fertility that is added to your farm, you cannot beat Sweet Clover for a money crop. Many have not grown Sweet Clover for the simple reason that they had difficulty in getting this seed to germinate, but the sowing of Scarified Seed makes it very easy to secure a stand.

Have You Included Sweet Clover in Your Order?

If you have not included any Sweet Clover in your order this year, by all means do so. The seed is much cheaper than red clover and it is the cheapest means of building up your farm. Don't overlook the advantages of growing it, for it certainly is one of the greatest crops that you could grow. We are the largest handlers of this seed east of the Mississippi River and are in a position to save you money. If you are not growing this great crop by all means start doing so at once. It will produce you the finest pasture you have ever grown. The hay crop you secure will be the most nutritious you have ever grown. It will build up your farm faster than any other crop you can grow on it. You can't beat Sweet Clover. Better try it.

What Sweet Clover Will Do for You

A few years ago Sweet Clover was considered a weed, a roadside pest. Now it is acknowledged one of the most valuable soiling crops, but there are still many farmers who do not fully appreciate how valuable it might be in their rotation.

All animals love Sweet Clover after they have learned to eat it, and a small acreage will help out very materially during the hot, dry summer months. I have seen a plot of a few acres in one end of a 30-acre pasture that practically supported half a dozen horses, as many cows, and a small flock of sheep during the months of August and September. And the pasture was a good blue grass one, too, that was partly first creek bottom. When the blue grass became short the animals spent most of their time in the sweet clover, and even then hardly kept it down.

The above is probably an extreme case, but it shows what sweet clover will do under favorable circumstances. Hogs love it too, and will keep it cropped close to the ground if the acreage is not large. There is some danger, of course, of grazing too close, and this should be carefully avoided; but if the plant is kept down to a foot or less in height the animals will pick off the juicy leaves

as they come out, and they are much more nourishing than the tall, hard, and woody stems and branches.

A small acreage of sweet clover of *Melilotus*, will pay on every farm. It will furnish, I am convinced, more highly nutritious forage than any other plant we have, and will stand a great deal of abuse. Practically the only requisite in the way of soil is that it have lime in it. It will grow in places that are too wet for alfalfa and clover, and on gravelly hillsides that are too deficient in organic matter to grow anything else.

The white-flowered variety is the best, and it is desirable to have the seed scarified—that is, have your seedsman run it through a machine that will scratch off the hard seed coat and make germination more prompt and sure. Buy good seed and sow in a good, firm seed bed, at the rate of about 15 pounds to the acre. Summer or fall seeding is desirable, or it can be sown in early spring. If you have not had alfalfa or sweet clover on your field before, better inoculate with some soil from a neighbor's field, or with the commercial inoculation, which is absolutely sure if obtained from a reliable source.

Sweet clover is also fine for bees. They love it, and will make more honey if sweet clover is close to hand.

ALSIKE AND TIMOTHY
PRODUCES THE BEST
OF HAY AND PASTURE

HIGHEST
QUALITY

ALSIKE CLOVER
SUCCEEDS WHERE
OTHER CLOVERS FAIL

RED CLOVER THE FOUNDATION
FOR ALL AGRICULTURE

LOWEST
PRICES

SWEET CLOVER
THE GREATEST SOIL BUILDER KNOWN

TIMOTHY
THE STANDARD HAY AND PASTURE
GRASS OF THE WORLD

OUR SEEDS SAVE THE BUYER MONEY, AND PRODUCE BIGGER AND BETTER CROPS