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BETTER FARM SEEDS

Gilt-Edge Seeds—The Quality Kind

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H. W. GORDINIER & SONS CO.'S BIG COUNTRY STORE

Franklin Square ∴ ∴ ∴ TROY, N. Y.

BY MAIL

YOU CAN ORDER YOUR SEEDS FROM **GORDINIER'S** FOR GORDINIER HAS A PERFECT SYSTEM

SEE HOW IT WORKS

DROP YOUR ORDER IN ANY LETTER BOX, ANY POST OFFICE, OR HAND IT TO ANY LETTER CARRIER ANYWHERE IN THE COUNTRY

IT WILL BE CARRIED QUICKLY TO

H. W. GORDINIER'S OFFICE AT TROY, N. Y. WHERE IT WILL BE ENTERED ON SHIPPING BLANKS FOR IMMEDIATE ATTENTION. THESE ORDERS ARE COLLECTED FOUR TIMES A DAY AND

RUSHED BY MESSENGERS OR TELEPHONED TO

GORDINIER'S BIG STORE HOUSE ON GREEN ISLAND. HERE MEN ARE READY TO PACK THE ORDER, OTHERS LOAD IT ON WAGONS OR IN CARS THAT RUN DIRECT TO THE BUILDING, AND YOUR ORDER IS ON ITS WAY. THIS STOREHOUSE IS CONNECTED WITH

D. & H. R. R.

N. Y. C. R. R.

B. & M. R. R.

B. & A. R. R.

ALL EXPRESS COMPANIES

ALL BOAT LINES

ELECTRIC EXPRESS

If you are too busy to come to Troy, just mail your order, and it will be shipped quickly and accurately.

HOW TO ORDER GORDINIER'S SEEDS READ CAREFULLY

Mail Order Business

We have no canvassers or agents to solicit orders. All outside business is done through mail orders direct to us. This means a saving to our patrons as well as to the firm. Close and prompt attention to such orders and honorable dealing have assured us a steady growth, and we now enjoy an immense mail order business. Our friends and patrons have found by experience that buying through letter is as safe and satisfactory as buying over the counter, and have materially assisted in the extension of our business.

Remittances

should be made by Post Office Money Order or Express Money Order. We disclaim all responsibility when remittances are not made as above directed. Where it is not possible to obtain these, the letter should be registered. Postage Stamps will be found a convenient method of remitting for small amounts, and can be used by us to advantage. Coin should not be sent by mail.

Packing

No charge is made for boxes or packing, nor for delivery to Freight Depots or Express Offices in Troy, N. Y. We charge for cotton bags as follows, Peck and $\frac{1}{2}$ bushel 10 cents each; 1 bushel, 15 cents each; 2 bushels, 20 cents each.

Order Early

It will greatly facilitate shipments if orders are sent in early. We aim to send off all orders the same or next day after receipt, but during the rush season this is impossible, hence the advisability of ordering early.

Name and Address

Please remember to write your Name, Post Office, County and State; also give number of Street or P. O. Box, as distinctly as possible; also the nearest Express Office; or if on a Stage route send us special directions, giving us the name of the Express Company delivering the goods.

If You Are Satisfied With Us,

with the goods you receive, the treatment we give you and your general business relations with us, will you do us the favor of mentioning the fact to some of your neighbors? If we can please you we can please others, and we assure you that we will be careful to make your friends more than satisfied with the experiment.

Always Remember

that we can save you money, no matter where you live. Write us about any seed you would like to know of, and your letter will be answered the same day it is received. If you wish to know exactly what the freight or express would be on any article to your station, write us and we will tell you.

Catalogues

We send our customers five catalogues annually, viz.: Garden Seed, Poultry, Farm Implement, Fertilizer and Timothy and Clover Price-list. Customers having more than one address will oblige by stating to which address they wish the Catalogues mailed.

Our Guarantee on All Gilt-Edge Seeds

WE guarantee that all Gilt-Edge Seeds purchased from this catalogue shall be exactly as represented, and all shipments made with the distinct understanding and agreement that you have the privilege of returning any article if for any reason whatever it is not satisfactory, provided we are notified as soon as you have had an opportunity to examine such article or give it a fair trial. We further guarantee that in any such case we will give the necessary shipping instructions for the return of the article and promptly refund the purchase price.

CLOVER SEED

Read why it pays to buy Good Seed. The difference between good and bad Clover Seed.

Quality.—Red Clover seed of good quality is of large size, dark colored, has a decided luster, and is practically free from weed seeds. Red Clover and Timothy seed are sold in more grades than any other seeds, all of the large dealers offering from five to ten qualities at a time. Among these grades will be found seed that is practically free from weeds and dirt, germinating 95 to 98 per cent. as well as screenings made up of small, light-colored or shriveled brown seed with a large percentage of weed seeds, including dodder and many other noxious weeds. These extremes are well represented by the analyses of the two following samples:

Sample No.	Price paid per 100 pounds	Percentage of weed seeds	Percentage of dirt, sticks and stones	Percentage of red clover seeds	Percentage of red clover seed that germinated	Number of weed seeds per pound	Actual cost per 100 pounds of red clover seed that germinated
1	\$5.20	25.78	26.16	48.06	18.26	139,727	\$28.48
2	15.00	.90	1.08	98.83	95.86	150	15.65

First-class Red Clover seed should contain very few weed seeds. This means at most but a few hundred and should mean less than 100 in each pound. Even this seems a large number, but Clover seed production has not yet received that special

attention which insures perfectly clean seed, and a few hundred weed seeds per pound constitutes a small number when compared with the thousands and tens of thousands of weed seeds per pound found in many samples of commercial Red Clover seed. Even very small commercial samples wholly free from weed seeds are extremely rare.

(From Bulletin No. 111, Bureau of Plant Industry, U. S. Dept. of Agriculture.)

Gordinier's Pea Vine, or Mammoth Clover

A great many farmers complain that the Clover does not grow big enough, and we were fortunate in buying this year a quantity of the old-fashioned "English" Pea Vine Clover, which we have seen grown around here to a height of 4 feet 6 inches; for enriching the land and plowing under there is nothing better. Price per lb.

Pea Vine Clover

Field of Pea Vine Clover

Club Orders

Get up a Club Order in your neighborhood and send it to us. We will see that you get the best of everything. Write us in regards to a Club Order. It will pay you.

Read what people have to say who use Gordinier's Recleaned Clover Seed. We have hundreds of satisfied customers. Why not you?

Ballston Spa, N. Y., Nov. 20, 1909.

Mr. H. W. Gordinier, Troy, N. Y.

Dear Sir: Your letter asking for information in regard to Pea Vine Clover at hand. This year had more hay on one acre of Pea Vine Clover than on four of other kind, and last Spring's seeding the Pea Vine Clover is 100 per cent. better than the other.

Yours truly,
G. J. BROWN.

Hebron, N. Y., Dec. 2, 1909.

Mr. H. W. Gordinier.

Dear Sir: In answer to your letter concerning Pea Vine Clover seed I am pleased to say that we have a splendid catch of the Clover. It is somewhat larger in stalk and leaf than the Northern. If it winters well I think I shall be pleased with and consider it well worth the extra cost. I cannot tell much about it until Spring. All of your seed gave extra good satisfaction in this neighborhood. Expect to have some of your seed the coming season.

Respectfully,
F. J. WILSON.

Greenwich, N. Y., Nov. 20, 1909.

Mr. H. W. Gordinier, Troy, N. Y.

Dear Sir: Replying to your favor of November 18, as to Clover seed purchased from you last Spring, can state I mixed the Pea Vine and Large Common Clover together, and it certainly has done fine, notwithstanding the prolonged dry weather; one field of 12 acres especially, near the highway, has attracted the attention of travelers all the Fall. I think it preferable to mix these Clovers; no doubt it makes a better stand in all conditions of soil. I intend to purchase some of Pea Vine and Large Common from you the coming Spring, and I wish to say right here that all the seeds I have purchased of you from year to year have always proved very satisfactory indeed, which, as you know, is all important to us farmers.

Very truly,
F. H. HILLMAN.

Cambridge, N. Y., Nov. 20, 1909.

H. W. Gordinier.

Dear Sir: In reply I will say that there is a good stand of Clover all over the field that was seeded last Spring with seed from your store, much better than I have had for a number of years. I am willing to pay more for seed that does well, and in the Spring will send you my order.

DONALD INGRAHAM.

Gordinier's Choice High Grade Extra Clean Clovers

Our brands of Gilt-Edge Medium and Mammoth Clover seed are the purest and best cleaned of all. Our large farm seed business has been built up by honorable dealing, handling the best grades and giving our customers just what they pay for and expect to get. Our Clover and Grass seed business is increasing very rapidly. We have pleased thousands, according to their friendly testimonials, and will please any one who will favor us with their order, and we ask you to be friendly and write us for samples and prices when wanting to buy large or small quantities.

Red Clover

More extensively grown in New England than any of the other Clovers. Of very rapid growth and does best on rich, warm loams. Its luxuriant foliage is not only valuable as a food for cattle, but also has the beneficial property of smothering weeds. Though naturally a biennial it may, by close pasturage, be made to last three or more years. Should be sown in the Northern States only in the Spring. Twelve to 14 pounds of seed sufficient for one acre when sown alone. Price per lb.

White Clover

Used largely in lawns and permanent pastures. It is perennial and thrives best on moist soil, but easily accommodates itself to a great variety of soils. Its stems are spreading, slender and creeping. The small, white flower-heads are borne from May to September. Sow 8 pounds to the acre. Price per lb.

Crimson Clover

Much disappointment has resulted from efforts to grow this plant. Poor seed, lack of moisture in the soil at time of sowing, and mistaken ideas of the utility of the plant at the North are fruitful causes. It has a place, however, in Northern agriculture as a rapid-growing, nitrogen-storing plant. Sown in July or August, it will make sufficient growth by December, even though it should Winter kill, to store in the soil all the nitrogen required by a following crop. It not only makes a more rapid growth, but also decays far more rapidly underground than other varieties of Clover, and thus quickly converts food for other crops. As it makes much of its growth when Winter Wheat and Rye are dormant it should not be sown with these crops for it will take the ground. If it survives the Winter, if not wanted for seed, it may be pastured, plowed under when in bloom, or cut for forage. If grown for hay, Crimson Clover must be cut just as it begins to blossom (earlier rather than later) as, if allowed to stand longer, the spines on the seed capsule become hard and irritate the mouth, and it is stated that horses have been killed by eating the over-ripe hay. Sow fifteen to twenty pounds per acre broadcast of our home-grown seed and harrow in well. Price per lb.

Alsike Clover

This is sometimes called Swedish Clover. It is one of the hardest varieties known, and is intermediate in appearance between the Red and White Clovers, possessing many of the qualities common to both. It is used more particularly in the East for sowing on wet lands, but it succeeds on any soil. It is very nutritious, and good for either green food, pasturing or hay. It should always be included in pasture mixtures. It is a great favorite with bee raisers and its flowers afford excellent forage for bees. It has become very popular the last few years, on account of the short crops and high prices of Red Clover, and large quantities of it have been used. It is designed to continue in favor as the farmers get acquainted with its merits. Sow (if alone), 8 to 10 pounds to the acre. Price per lb.

Imported Red Clover of low grade, natural size and magnified eight times

Red Clover of good quality—the kind we sell. Ask for sample

SOMETHING ABOUT OUR COMPETITORS' PRICES

We sometimes receive letters that so-and-so were quoting lower prices than we were. This may be true, but they are not selling Gilt-Edge Seeds. We know Gilt-Edge Seeds are worth the price asked for them and cannot be sold at the price of cheap seeds to quality buyers. Gilt-Edge Seeds give you that protection of purity and germination that is not to be found in cheaper seeds. You have enough weed seeds without planting any more.

Bokhara or Sweet Clover Yellow Flowering

Uses.—Sweet Clover was used as a food for animals at least 2000 years ago. The most prominent use at present is probably that of a soil improver. In this role there appears to be no other plant which so quickly puts waste land or run-down farms back into condition for producing crops. The value of Sweet Clover for this purpose is recognized in Alabama and Mississippi, and also in parts of Kentucky. In other sections of the country it has been used in a small way as a green-manure crop, the second year's growth being plowed under. By this method extremely large quantities of vegetable matter are returned to the soil. The root system alone has been estimated as about 20 tons green weight per acre in a good growth of Sweet Clover. The decay of the fleshy roots at the end of the second year, when the plant itself dies out, opens up the soil and provides a passage for the water and air into the subsoil.

It is better adapted than Alfalfa to short rotations on account of its biennial nature. Seeded in the Spring of the year, either alone or with a nurse crop, it produces its largest growth the following season and is ready either to turn under for green manure or to be utilized as a hay crop. This feature allows it to be used in short rotations with corn or small grain. In a great many soils where alfalfa does not thrive Sweet Clover has proved to be an excellent substitute. In other soils, as in the sandy soils of northern Nebraska, the use of Sweet Clover on the land previous to seeding Alfalfa gives the inoculation so badly needed for the success of Alfalfa and also improves the physical properties of the soil. Its use in other localities as a forerunner crop for Alfalfa is strongly advised.

The value of Sweet Clover as a hay crop is a question of very much dispute. In localities where it has been grown for some time the producers assert that all kinds of stock eat it readily after they have once become accustomed to the taste. In food principles it is practically equal to Alfalfa, and feeding experiments with sheep at the Wyoming experiment station have fully demonstrated its value for this class of live stock.

At the present time the seed of Sweet Clover commands almost the same price on the market as that of Alfalfa or Red Clover. The production of seed, if the first crop is allowed to mature, is much heavier, hence the profits per acre from a seed crop are considerable.

As a bee pasture it ranks among the best, and even before its possibilities in other lines of agriculture were recognized it was extensively used by honey producers as a pasture for bees.

Soil requirements.—Sweet Clover has ability to thrive on poor clay soils as well as on poor sandy soils, but it prefers soils of limestone origin; if seeded on clay soils that are inclined to be sour, considerable lime should be added at the time of seeding. In the limestone soils of Alabama, Mississippi, and parts of Kentucky it grows freely and is quite widely used, while on the adjoining pure clay soils little of it is to be found. Sweet Clover is also very resistant to alkali and plants may be found in the West growing on soil where little else than salt grass otherwise occurs.

Inoculation.—On the poorer soils, in localities where Sweet Clover is not common, it is quite important that the soil be inoculated at seeding time to insure good results; and even in localities where Sweet Clover is plentiful the early growth has been made much more vigorous by thoroughly inoculating the soil. Inoculation can be accomplished by scattering 300 to 500 pounds per acre of the soil from an old Sweet Clover

patch over the field, either by hand or in a fertilizer drill. Inoculation is accomplished in the South by the use of seed in the hull, which seed has been gathered from the ground and has some soil adhering to it. Pure culture for the treatment of the seed is also furnished by the United States Department of Agriculture.

Eradication.—The failure of the farmers throughout the United States to make use of this valuable legume has largely been on account of the fear that it could not be eradicated from their farms if once started. The biennial nature of the plant makes the problem of eradication a very easy one. It will not persist when continuously mown so that it cannot produce seed, nor is it troublesome in clean, cultivated or intertilled crops. Its appearance in a grain or Alfalfa field, therefore, is no reason for alarm. The frequent cuttings of Alfalfa will within a few years entirely destroy the Sweet Clover, and in grain or corn fields the ordinary cultivation accorded such fields will keep the Sweet Clover from being troublesome. Many people have classed the Sweet Clover as a perennial because it appears annually along the roadsides and in deserted fields. Its appearance, however, is due to the fact that it reseeds itself and not that it presents a new growth each year from the old root.

Considering the above points of advantage possessed by this Sweet Clover, a more widely extended use of it in the improvement of worn-out lands and preparation of ground for Alfalfa through inoculation and soil improvement will prove of value. The use of Sweet Clover as a hay and pasture crop in localities where Alfalfa or other leguminous forage plants do not succeed is recommended.

20 or 30 lbs. of seed required for an acre. Read Farmers' Bulletin, No. 485, published by the Department of Agriculture, Washington, D. C. Price per lb.

GILT-EDGE

TRADE
REG. U.S.

FIELD SEEDS

MARK
PAT. OFF.

GORDINIER'S
TRADE MARK

What it
means to YOU

This Trade Mark on all Gilt-Edge Seeds is your protection for purity and germination. See that this mark is on every bag. This Trade Mark is registered at Washington.

Protect Yourself from Poor Seed

Donot let your dealer sell you something just as good as Gilt-Edge Seeds—*The Quality Kind.*

Sold only by H. W. Gordinier & Sons Co.
This brand of High Grade Seed is registered by us at Washington.

FIELD OF GORDINIER'S ALFALFA CLOVER
2nd Cutting, September, 1912. Grown by Chas. Carrity, Cohoes, N. Y.

Some Practical Directions for the Growing of Alfalfa

By EDWARD VAN ALSTYNE, Kinderhook, N. Y.

This is not designed to be a full scientific treatise on Alfalfa, but rather a setting forth in simple language of a few of the basic principles necessary to insure a stand.

SOIL

Alfalfa will grow on a variety of soils, but does best on those that are rather heavy and somewhat rolling, if they are well underdrained. Alfalfa cannot be grown on soils where the water table is within two feet of the surface but when the free water is removed the plant often grows best on them.

The soil must be rich in quickly available plant food. Alfalfa is very delicate when young, and needs an abundance of available, easily digestible, food. It is similar to a young turkey in this respect which, when young, has to have food and surroundings of just the right sort or it quickly succumbs, but when aged, can feed on almost anything, and go far afield.

While Alfalfa will best adapt itself to the above-named soils, it will grow on a variety from the lightest sand to a heavy loam.

FERTILITY

Manure is excellent and one need have little fear of using it liberally, provided it is free from weed seeds. In such cases it is better to apply it to a previous crop and by good tillage destroy all such seeds.

On most soils it is wise to supplement the manure with mineral fertilizers. Alfalfa is a crop which should stand from eight to twelve years, and one can afford to feed it liberally.

I would advise the use of at least five hundred pounds per acre of a fertilizer analyzing about ten per cent. of phosphoric acid and five per cent. of potash. Where no manure is used directly on the Alfalfa, from one hundred to two hundred pounds of Nitrate of Soda per acre will usually pay, if added in the following Spring. Although a nitrogen-gathering plant, Alfalfa must depend on nitrogen which is available in the soil until the bacteria form on the roots.

LIME

Lime is one of the essentials. While it is true that there are a few limestone soils on which it is not necessary to apply additional lime,

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And Save The Middleman's Profit. We have no canvassers or agents to solicit orders. All outside business is done through the mail direct to us. Do not buy your seed from the dealer who buys less than a car load, for when you do it means another profit added. We are the largest dealers in Seeds, Poultry Supplies and Farm Implements in Northern New York and only car load buyers. Send us your order this year.

they are the exception, and in many instances the limestone soils respond to an application, and without it refuse to grow Alfalfa. Lime is essential for three reasons:

First: Alfalfa will not grow in an acid soil. Lime will make such soil sweet or alkaline.

Second: Lime is a needed plant food for Alfalfa, each ton of hay removing about sixty pounds of lime.

Third: Lime has a tendency to unlock insoluble plant food in the soil and also to increase the growth of soil organisms.

HOW TO USE LIME

The minimum amount per acre should be two tons of burned unslaked lime, or its equivalent in some other form. A smaller amount will often sweeten the soil and give food for the Alfalfa for a season or two, after which it may die for lack of sufficient available lime for food.

The finer the particles in which the lime is applied, the more valuable it is, as a particle of lime unites with a particle of soil and so acts on it as to render it alkaline and in this form it is more thoroughly incorporated with the soil. Aside from the fineness, the value of lime depends on how much lime one actually gets. Assuming, for sake of comparison, that the lime is pure (which it seldom is absolutely), a ton of fresh burned lime, or calcium oxide, would contain two thousand pounds of actual lime, and a ton of the same lime, slaked, or in the hydrated form, would contain about one-fourth less, or approximately fifteen hundred pounds. A ton of the same, as ground limestone, unburned, would contain a little over half as much actual lime. This is known as the carbonate form. Given the same degree of fineness, in actual practice, one appears to give as good returns as the other, so long as an equivalent amount is used.

It is, then, largely a question of cost. It is obvious that the freight would be as great per ton on the last named as on the first with only a little over half the quantity. On the heavier soils the oxide form is rather to be preferred because it helps to break up the organic matter of which there is usually an abundance in such soils. On lighter soils, where humus is deficient, it is advisable to use the carbonate form if one can obtain it at practically the same price.

WHEN TO APPLY LIME

The lime may be applied at any time that most suits the convenience of the grower and, as it is somewhat slow in its action, it is preferable that it should be applied some time ahead. It is always wise to apply it on the surface of the ground, rather than to plow it under, and then work it in as the ground is fitted.

INOCULATION

On soils where Alfalfa has not previously grown it is usually found necessary to inoculate the soil with the Alfalfa bacteria. The better way to do this is to take the soil from an old Alfalfa field, and use not less than three hundred pounds per acre; more will be better but care must be exercised that there are no foreign weeds sowed with the bacteria infected soil. Such soil should not be allowed to be exposed to the sun or become dry. It should be sowed in the latter part of the day and immediately mixed with the soil by the harrow; otherwise the bacteria are liable to be destroyed by drying. The nodules on the roots of the common Sweet Clover contain the same sort of bacteria as the Alfalfa and the soil in which it grows is being used by many with excellent success. Under ordinary conditions the prepared bacteria have not been as satisfactory.

TILLAGE

The ground should be plowed very deep, and then compacted, after which the surface should be frequently stirred to prevent the escape of moisture, as well as to destroy weed seeds and insure a fine seed bed. A cutaway harrow is a fine tool for this purpose.

WEEDS

Weeds are a very serious foe to Alfalfa, and land made sufficiently rich to grow a satisfactory crop is in ideal condition to produce an abundant crop of them. For this reason it is wise to have the field planted to some crop that can be tilled the previous season. By year thorough, clean culture the most of such weeds can be destroyed.

TIME OF SOWING

In localities where Alfalfa thrives it seems to make very little difference at what season the crop is put in. In those where it is not established many have succeeded with Spring sowing; but all the experiments in untried localities, particularly in the east, go to show that the ideal time is in early August. There are several reasons for this. One is that a Spring crop can be grown and in case the Alfalfa is a failure there is not the loss of the use of the land for a year. Next, one escapes the Summer heat and Summer weeds, two serious

3rd Cutting of Alfalfa, October 2, 1912. Grown by Chas. Carrity, Cohoes, N. Y.

It pays to sow Gordinier's Northern Grown Alfalfa Seed

foes of the plant. If sown in August the plant does not have the opportunity to send its tap roots as deeply as if put in earlier in the season, and, consequently, there is not the danger of their being broken off by thawing and freezing and heaving of the soil during Winter and Spring. This has been found particularly true in sections where the Winters are open. Alfalfa can be put in following a crop of early Potatoes. The ideal crop, however, to precede Alfalfa seems to be Oats and Canadian Peas, sowed very early in the Spring and cut green for forage late in June or early in July, the ground immediately replowed, rolled, lined—if it has not been previously done—fertilized as before stated, then harrowed for five or six weeks at frequent intervals, and the seed put in, sowing both ways, thirty pounds to the acre, this being covered with a light harrow or weeder and then rolled.

SEED

It is very important that a sample of the seed should be secured at some period in advance of the time when it is intended to be sown, in order that it may be passed upon by the State Experiment Station which will examine such seed for purity, without cost. Very much of the Alfalfa seed contains dodder, trefoil, and other plants equally objectionable. The grower can make germinating tests by counting out 100 seeds and either sowing them in earth and noting how many sprout, or by placing these seeds between two pieces of damp cloth or blotting paper, testing on a bed of moist sawdust kept in a room moderately warm.

If the Fall is favorable the plant often makes a foot of growth in the year it is sowed. It is better not to clip it off, for this growth acts as a protection to the crowns of the plant and is so succulent that there will not be enough coarse matter left in the Spring to interfere with the crop of hay.

If for any reason it is sown in the Spring—which we do not recommend—under favorable conditions a crop may be gathered the first season.

The above mode of procedure has given splendid crops in a large number of instances, and while in many cases not all these things have been essential to the growth of the plant, yet, if any of them are left out, such as drainage, inoculation, lime, fertility, or tillage, all the rest may go for naught.

Alfalfa Plant
Note how long
the roots are

FIELD OF GILT-EDGE TIMOTHY

JOHN DEERE, HAY LOADER, AT WORK IN A FIELD OF GILT-EDGE TIMOTHY

GILT-EDGE TIMOTHY

When you buy your seeds from us you run no risk. If not entirely satisfactory on receipt and examination you may return them at our expense and money paid for them will be refunded.

Please Note—Prices of Clover and Timothy are subjected to fluctuations of the market. Buyers should write for firm and lowest prices before ordering. We will quote by return mail, then there is sure to be no misunderstanding.

We carry the largest stock of Timothy seed in this section of the State. We supply granges as well as private trade. Ask for samples on any of the following grades:

Fancy Gilt-Edge Timothy

This is the highest grade seed obtainable. Its germination is almost perfect and the purity will average 99½ to 99.85 per cent. pure. There is no cleaner, more sound Timothy seed on the market than Gilt-Edge Timothy and it is sold under our "Money Back Guarantee." Remember all Gilt-Edge Timothy is tested by the Government for purity and germination. Price per bus.

HARVESTING GILT-EDGE TIMOTHY ON THE FARM OF EDWARD VAN ALSTYNE,
KINDERHOOK, N. Y., 1912. 2 TONS PER ACRE

Choice Gilt-Edge Timothy

We offer this grade as an extra pure and clean seed, not as handsome to the eye as our Fancy Gilt-Edge, as it has more hulls on, but the sowing value in comparison to cost makes this seed very popular at moderate cost. Government test. Write for sample. Price per bus.

Prime Gilt-Edge Timothy

This grade is what most dealers sell as a high-grade seed, and has a large sale due to the low price. Remember all our Timothy is re-cleaned. Write for sample. Government test. Price per bus.

**Reduce the High
Cost of Living**

—\$—

**Buy Your Seed at Wholesale
Prices and Save The
Middleman's Profit**

Sudan Grass

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. It cannot possibly harm them and, in fact, is 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. How long does it take to make a crop?

A. It will make a crop as quick as millet and quicker than either cane or kaffir. With warm weather it will be ready to cut for hay in 8 to 10 weeks from sowing and again every 30 days until killed by frost.

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 makes far better feed than either. Ours made about 8 tons per acre cured feed, besides a crop of 16,000 lbs. of seed per acre.

Q. Where will it grow? Can it be grown in the north? On thin land?

A. It will grow anywhere that field corn, cane, kaffir, or milo can be grown and besides, will thrive where it is so dry none of these can be grown. It will make a fair crop even on very thin, or sandy or stony land. It likes heat, the more the better, but will grow wherever there is heat enough to grow corn to tasseling. It has been grown successfully as far north as South

A Few Questions and Answers on Sudan Grass

Dakota and southern Montana. Probably will grow successfully in every state in the Union.

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 2 to 5 lbs. of seed per acre. It can be cut by hand or with a mower, or binder, or corn binder. It handles easiest in bundles, as it is so long it tangles if handled loose. It cuts easily and perfectly. Many people, in order to save the work of cultivating, sow it broadcast or drill it with a wheat drill, using about 20 lbs. of seed per acre and handle it with a grain binder. This gives about the same yield as the drilled crop and no cultivating, but takes more seed. In an extremely dry country it should always be drilled in rows and cultivated so as to conserve the moisture. This is true of all crops in such countries.

Q. How can this be done and how much seed will it take?

A. Use 2 to 6 lbs. of seed per acre. Small patches can be drilled with a garden drill. For larger fields use a cane or kaffir drill with cane or kaffir plates. This means a plate with very small holes, generally three-sixteenths of an inch in diameter. Run the drill very shallow. It should not be put in over 1 inch deep. Plant it a little later than field corn, as it does not like cool weather.

Q. How should the crop be harvested?

A. It can be cut with a mower, or a binder, or a corn binder. The corn binder would be better. It cures readily when set up in shocks. It can be cut by hand with a corn hook in small patches. The seed can be threshed with a regular threshing machine, or in small amounts beat out with a club.

Q. When should I order the seed?

A. The sooner the better. The supply is short, especially on the northern, grown seed and the sooner you get it the better.

Q. What will it cost?

A. See our price list.

GRIMM ALFALFA

Resists Winter Blasts and Summer Droughts

This variety is considered the hardest species 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 South Eastern 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 conditions 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 any where else that it may be sown.

ROSEN RYE

Without exception the most spectacular grain introduction of the century.

Some years ago a Russian student at the Michigan Agricultural College remarked that the winter rye grown in America was inferior to that grown in his native country. After returning to his home, Mr. Rosen sent a small sample of this rye to the M. A. C. The variety now known as Rosen rye, was bred from this small sample by Mr. Spragg, plant breeder at the college. Small quantities of this rye were distributed in 1912, and from that time forward its advance in popular favor has never been equaled by any other cereal in America.

Average yield of the state for common rye, 15 bushels per acre. Average yield of the state for Rosen rye, 25 bushels per acre. These are the official figures of the M. A. C. In 1916 the lowest yield in this (Ogemaw) county was 32 bushels per acre, which was better than the highest yield of any other variety, while some of our fields yielded 40 to 46 bushels per acre. We have records of more than 50 bushels per acre.

Considering average yields and average market prices of the various kinds of grain during the past three years, the proof seems conclusive that Rosen rye produces more bushels per acre than any other cereal whatsoever. The grain of this rye is very much larger than other rye, for which reason more seed should be sown. In this country we have sown from five to eight pecks per acre. We have found that seven pecks is right for average land.

Sow $1\frac{1}{2}$ to $1\frac{3}{4}$ bushels of seed to the acre.

Prices and samples on application.

WEIGHTS PER BUSHEL AND QUANTITIES USUALLY SOWN PER ACRE

	Lbs. per Acre	Lbs. per Bu.		Lbs. per Acre	Lbs. per Bu.		Lbs. per Acre	Lbs. per Bu.
Alfalfa—broadcast.....	18- 20	60	Peas, Cow—drilled.....	40- 60	60	Peas, Cow—broadcast.....	80-120	60
Alfalfa—drilled.....	15- 18	60	Cane or Sorghum—for fodder...	50-100	50	Peanuts.....	5- 6	22
Barley.....	90-110	48	Cow Peas—drilled.....	40- 60	60	Potatoes, White or Irish.....	450-700	60
Beans, Navy.....	13- 18	60	Cow Peas—broadcast.....	80-120	60	Potatoes, Sweet, 10,000 to 15,000 plants.....		50
Beans, Pinto.....	15- 18	60	Cotton Seed.....		30	Red Top—solid seed.....	12- 15	14
Beans, Soja.....	30- 90	60	Flax.....	35- 45	56	Red Top—in chaff.....	30- 40	14
Beans, Castor.....	4- 5	46	Fescue, Meadow.....	20- 30	24	Rape, Dwarf Essex—in drills...	3- 4	50
Bluegrass, Kentucky.....	35- 40	14	Hungarian Millet.....	30- 50	48	Rape, Dwarf Essex—broadcast...	5- 6	50
Bluegrass, English.....	20- 30	24	Johnson Grass.....	20- 30	25	Rye.....	85-100	56
Brome Grass.....	20- 25	14	Jerusalem Corn—in drills.....	8- 12	56	Rye Grass, English.....	40- 50	24
Broom Corn—for Brush.....	3- 5	46	Kaffir Corn—in drills.....	8- 12	56	Rye Grass, Italian.....	40- 50	24
Buckwheat.....	60- 70	48	Kaffir Corn—broadcast.....	50-110	56	Sorghum—in drills.....	8- 12	50
Bermuda Grass.....	3- 5	30	Lawn Grass—1 lb. to 200 sq. ft.			Sorghum—broadcast.....	50-100	50
Clover, White.....	6- 10	60	Millet, German and Common...	30- 50	50	Soy Beans.....	30- 90	60
Clover, Red.....	8- 12	60	Millet, Siberian.....	20- 25	50	Speltz.....	90-100	40
Clover, Alsike.....	8- 10	60	Millet, Japanese.....	10- 15	30	Sweet Corn.....	10- 15	—
Clover, Crimson.....	12- 15	60	Millet, Hog or Broom Corn.....		50	Sunflower, Russian.....	8- 10	24
Clover, Mammoth.....	8- 12	60	Millet, Pearl or Cat-tail.....	10- 12	56	Sweet Clover—unhulled.....	30- 40	60
Clover, Sweet—unhulled.....	30- 40	60	Milo Maize—in drills.....	8- 12	56	Sweet Clover—hulled.....	20- 25	60
Clover, Sweet—hulled.....	20- 25	60	Oats.....	60- 90	32	Sudan Grass in rows.....	2- 6	50
Corn—Shelled.....	7- 8	56	Onion Sets, Bottom.....	200-300	32	Timothy.....	12- 20	45
Corn—for fodder or silage.....	30- 35	56	Onion Sets, Tops.....	150-200	28	Tall Meadow Oat Grass.....	20- 30	14
Corn, Pop.....	6- 8	—	Orchard Grass.....	25- 35	14	Vetches or Tares—with grain...	60- 70	60
Cane or Sorghum—for seed or sorghum.....	8- 12	50	Pasture Mixture.....	20- 40	25	Wheat.....	90-100	60

Why You Should Buy High-Grade Seeds From a Dealer Who Has a Reputation to Maintain

Good seed is worth good money. The quality of the seeds used is such a factor in farming success or failure that it may be broadly stated, as a general rule, that the unsuccessful farmers are the farmers who buy cheap seed. It seems difficult for them to realize that seed at fifteen dollars a hundred pounds can be much cheaper than seed at five dollars a hundred pounds. The up-to-date modern farmer never hesitates to pay the top price for what he wants. Price, indeed, is a small consideration to him; he wants the best quality.

As the ordinary buyer of seeds cannot tell by looking at them whether they are good or not, he must take the word of the seedsman from whom he is purchasing, and many times the country dealer himself does not know the exact quality or he does not know their history. So buy from a dealer in high-grade seeds who has a reputation to maintain. Cheap seed is expensive! And this cannot be better illustrated than by the following analysis of two lots of Red Clover seed which were actually bought in the open market, one lot costing five dollars and twenty cents a hundred pounds, and the other fifteen dollars a hundred pounds:

	Sample 1	Sample 2
Percentage of weed seeds.....	25.78	.09
Percentage of dirt, sticks and stones.....	26.16	1.08
Percentage of Red Clover seed.....	48.08	98.83
Percentage of Red Clover seed that germinated.....	18.25	95.86
Number of weed seeds per pound.....	139,727	150
Actual cost per hundred pounds of Red Clover seed that germinated.....	\$28.48	\$15.65

Obviously the farmer who bought the cheap seed made an expensive investment. Had he bought one-third the quantity, buying good seed, he would have had twice as big a crop. The temptation to mix good and poor seed or otherwise to adulterate what they sell is apparently a temptation too big to be resisted by some dealers, as the profits are so large and the risk of detection seemingly small.

But whether the seed is adulterated intentionally, or whether it is just naturally poor, makes little difference to the farmer. The result is the same to him in either case—wasted money and a poor crop. He gets it at both ends—spends money for nothing in buying poor seed and spoils a crop by using it, which costs him more money.

The United States Department of Agriculture is trying to suppress seed adulterations by publishing, by authority of laws recently enacted, the names and addresses of firms known to sell adulterated seeds or who misbrand the goods they sell.

If you buy your seeds from a reputable house you can be assured that you are getting seeds which are practically pure.

It is really much more important to know the germinating power of the seed—how much will actually grow—for practically the only adulteration that high-grade seeds contain are "dead seeds" and it is impossible to buy seeds which do not contain at least a small per cent. of these. The seed with the greatest percentage of germinative power is the best seed to use.

Miscellaneous Seeds and Grains

It Costs You Nothing to Have a Look

Before you buy from any other source let us submit you samples of our Grass Seeds. We are satisfied that after seeing our samples you will have nothing else.

Japanese Buckwheat

A popular early variety of Buckwheat. It grows a large, heavy straw, with many branches, and succeeds well in the extreme North. About a week earlier than Silver Hull. The grain is very large, of dark brown color. Sow from June 10 to July 10, one bushel per acre. Prof. Moore urges Wisconsin farmers to grow more Buckwheat. He says: "The increasing favor of Buckwheat for human consumption and as an animal food has caused a great demand for it within the past two or three years. On account of the small amount grown in this State, a large portion of the flour and Buckwheat feeds are shipped in from other States. Buckwheat will grow on lands that are low in nitrogen and produce a fairly good crop. In many instances where other crops have been killed by frost, excessive moisture or insect enemies, the ground can be used for Buckwheat, as this crop admits being sown as late as July 4th." Price per bus.

Silver Hull Buckwheat

The best variety in our estimation. It has a rather small grain, light gray in color, nearly round in shape. Our farmers here are sowing Silver Hull quite generally now in preference to Japanese, as it not only sells better, but they claim it yields more. We have a large stock to offer this year of fancy seed, grown right here. Price per bus.

Dwarf Essex Rape

This plant will produce a greater weight of forage within a given time than any other known to the farmer, provided it is sown in rich soil. The yield will be proportioned to the amount of fertilizing material used. The plant will be ready for pasture in six or eight

weeks. If for soiling, best sow in drills, using one to two pounds of seed per acre, and cultivate as long as there is room between the rows. For pasture four pounds per acre may be sown broadcast either alone or with Barley or Oats. Barley is preferred as shading the Rape less. One acre of Rape well grown will supply pasturage for twelve sheep six or eight weeks. It furnishes excellent soiling food for any live stock. Sheep and hogs may be pastured upon it. Horses and cattle are apt to tread it out. It should be fed moderately at first, as, in common with other green vegetation, it causes bloating if eaten in excess. The above applies to true Dwarf Essex Rape. There are other varieties of Rape seed costing less, but nearly worthless for pasturage. Our seed is of our own importation. Price per lb.

Dwarf Essex Rape

There is no firm better equipped for handling high-grade seeds than H. W. Gordinier & Sons Co. Buying as we do in car load lots, the seed is first tested for purity and germination. It is the first thing Gordinier sees to. *Gilt-Edge Seeds* stand alone for quality. Place your order with us this year.

MISCELLANEOUS SEEDS AND GRAINS—Continued

White Canada Field Peas

These Peas are grown principally for their vines which make hay equal to the best Clover hay. They are usually sown with Oats and cut when the Oats head out but before the grain is ripe. If any one is likely to be short of hay he will do well to sow a few acres of Oats and Peas. We have used this hay for sheep, horses and cows with the best results. It is as easily cured as Clover and will yield large crops. We sow 2 bushels of Peas and 1 bushel of Oats per acre. Sow early in the Spring. Price per bus.

Canada Peas

fertilizer for orange groves the Velvet Bean is said to be unequalled. It is planted in rows 4 feet apart and 1 foot in the row, 2 or 3 Beans in a place, as soon as danger of frost is past. Yield, 20 to 35 bushels to the acre. Price per bus.

Velvet Bean

Used by the farmers in Louisiana as a forage plant, and also as a fertilizer plant for turning under just in the same way as the Cow Pea. Stock readily eat the vines and leaves, and the Beans, when ground with or without the pod, are used in place of Oats or Corn, or mixed with them. As a fertilizer for orange groves the Velvet Bean is said to be unequalled. It is planted in rows 4 feet apart and 1 foot in the row, 2 or 3 Beans in a place, as soon as danger of frost is past. Yield, 20 to 35 bushels to the acre. Price per bus.

Soja or Soy Beans

For full information about Soy Beans, culture, etc., write to the U. S. Dept. of Agriculture, Washington, D. C., for Farmers Bulletin No. 372. Or the Cornell University, Department of Farm Practice and Farm Crops, Ithaca, N. Y. These bulletins are free. Write today.

We know of no plant having a wider or more useful range of possibilities than the Soy Bean. When one stops to think of the great feeding value of the grain, of the entire plant's being very valuable for forage, of its being a legume and a heavy gatherer of nitrogen to the soil, and that it is by no means difficult to grow nor exacting as to the kind of soil it requires, he is bound to realize that it occupies a position unique among all our crops. Not only is the grain as nourishing as oil meal, but it is as greedily eaten as corn, and as easily digested as any grain we have ever fed. Moreover, there seems to be a tonic effect about the entire plant, and stock fed either the grain or the forage become full of life and energy as with no other grain that we have ever used. As a hay plant it certainly deserves to compare very favorably with anything that we are now growing, especially so when the best of the new varieties are used. These are not only large enough to produce a great quantity of feed, but the stems are fine enough so that there would be less waste than with most of the old varieties. Also the habit of the new varieties is much superior to that of most of the old ones, the plants standing erect and being easily cultivated and easily harvested.

In habit the Soy Bean is very far superior to the cow pea, the latter being recumbent and difficult to cultivate and to harvest. As a nitrogen-gatherer we are sure the Soy Bean has no superior, and where

a crop to plow under is desired, nothing is better to add humus to the soil.

Its possibilities for silage have not been fully demonstrated, but it has been thoroughly tested in connection with corn, and in this way it makes as highly satisfactory a product as any that we know of, the beans greatly assisting to make a balanced ration. When all these facts are considered, and also that it will grow on either fertile or impoverished soils, either limestone or freestone, that while it is not quite a "lazy man's crop," it is not particularly difficult to handle, its high value will be fully realized.

The culture is not difficult. Sow just after corn planting, when the ground is warm, in drills 30 inches apart and 3 or 4 inches apart in the drill. From one to two pecks will seed an acre. When desired for hay, cut when the pods are partly developed. Soy Beans mixed with corn make splendid silage. Every man who has a silo, try them. We offer seed of three leading early varieties, and our seed is all Northern grown.

Extracts from Cornell University Experimental Station, Ithaca, N. Y.

Be sure and send for the Bulletin on Soy Beans.

The proposition to grow the Soy Beans in the same rows with the corn, and thus enrich the quality of the fodder without materially decreasing the yield, has been tried by a few farmers at different points in the State. In some instances the practice has been followed for a number of years with success; in others the successful association of Soy Beans with corn has been demonstrated, but the grower has not made use of the fact in a practical way. A brief account of the methods followed by a few farmers who have proved the value of the mixed crop is given here.

In 1905, a farmer at Millbrook, N. Y., began to plant corn and Soy Beans in hills by hand. The proportion was 4 kernels of corn to 6 Soy Beans in hills 36 x 40 inches. That season four acres of the mixed crop yielded 72 tons of fodder. The proportion by weight of corn fodder to Soy Bean fodder in the mixture was estimated to be about 5 to 1. In 1906, the mixed seed used was in the proportion of 4 or 5 of corn to 10 or 12 of Soy Beans per hill. The yield of fodder was not reported, but the proportion of corn fodder to Soy Bean fodder was slightly less than 5 to 1. In March of 1907, a sample of this silage was sent to the New York State Agricultural Experiment Station at Geneva for partial analysis. Doctor Van Slyke reported that the sample contained 4.22 per cent. protein and 2.2 per cent. crude fat.

From Cuba, N. Y., a young farmer writes: "We planted Soy Beans in all our ensilage corn this year and they grew very well, being well podded and nearly ripe by the time the corn was ready for the silo. We mixed about 1 bean to 2 kernels of corn, planting in hills 3 feet apart each way. Our farm is nearly all gravelly loam, a very good corn soil. We think the Soy Beans add much value to the ensilage on account of their protein content. We procured some seed of the Medium Green variety last year and planted two rows 25 rods long. They produced a bushel of beans, which we used this year in the corn, without inoculation of any kind."

Soja Beans

Medium Green Soy Beans

Price per bus

BAGS

A great many of our customers neglect to pay for bags when sending their order. The prices for bags are as follows: 2-bushel bags, 20 cents each; 1-bushel bags, 15 cents each; 1/2-bushel bags, 10 cents each.

GORDINIER'S SENSATION OATS

Grown by Edward Van Alstyne, Kinderhook, N. Y., 1912. Yield per Acre, 65 Bushels

OATS

All Oats are thoroughly screened and fanned to preserve only the heaviest seeds. Absolutely free from smut.

Northern Grown Oats

Owing to numerous requests from our patrons for stock seed grown in Canada, we made arrangements this year for the growing of several of our principal varieties in Northern latitudes. The result is that we have an extra-select stock of the following varieties to offer our customers. The seed is extra bright, tests from 38 to 42 pounds per bushel. These Oats are all carefully screened and fanned to remove small or light Oats and all weed seeds. Samples will be gladly sent on application. Broadcast or drill, from 2 to 3 bushels per acre.

We are not great believers in fancy Oats at extravagant prices, but we do believe an occasional change of seed is a paying investment, and that new hybrids have been introduced of great value. The stock we offer was especially grown for us for seed, and carefully re-cleaned by us, and who would not grow pure, reliable, choice improved heavy Oats, in preference to the light, mixed, chaffy kinds, that only yield half a crop of inferior quality.

Gordinier's Sensation Oats

Sure Croppers, Very Heavy, Stout Straw, and Never Lodges, Which Accounts for Its Beautiful Color.

We offer you carefully grown seed raised entirely from selected stock. The result of this care in selection is shown in the crop, which is the finest ever grown, and averaging upwards of 80 bushels to the acre. So that the seed now offered as Gordinier's Sensation is the very best, and everyone should renew their stock at once. This wonderful grain stands the test even in the driest seasons, and today, after hundreds of trials in all parts of the country, its fame is higher and more secure than ever before. Reports from all sections indicate a satisfaction that is truly gratifying, but not more than was expected when it was first sent out, for it had been thoroughly tried and proved to be the most prolific variety of Oats on record. One hundred bushels to the acre have been raised, and that certainly ought to satisfy the most exacting. On fields to which no fertilizer has been

GORDINIER'S SENSATION OATS

SAMPLE GORDINIER'S SENSATION OATS

applied for two years, 70 bushels to the acre have been produced. This year all that has been claimed for it has again been realized. An average of 80 pounds has been raised from a single pound of seed—30 pounds in excess of what was claimed for it when first introduced. The grain is white, large and plump; ripens early, has a stiff straw of good length. It tatters freely and throws up a large number of stems and therefore can be sown thinner than ordinary Oats. It is as nearly rust-proof as any Oats can be. Every one who raises Oats should try the variety. An Oat that will yield 50 to 70 bushels to the acre with ordinary culture is good enough to raise and good enough for everybody to make a trial of. On good soil and with good weather it will go far ahead. Price per bus.

A FIELD OF SENSATION OATS

Gordinier's Wonderful Four-Rowed Barley

This wonderful Barley has now been grown by us for several years past with the best results, so we can safely guarantee it in every way as being the very best Barley for farmers to raise. The hull remains tight, which fact alone places it at the head of all Barley. Is four-rowed, of unusual length of head, well packed with solid, plump grains clear to the tips. Is the earliest to ripen, hence valuable to plant either in the extreme North or extreme South, and will do equally as well in the Middle States. Frost will not hurt it, and it can be planted early in March and ripens in June, therefore suited in every way to be easily handled by the farmer. The straw is somewhat larger and taller than common Barley, but much stiffer, and will stand up on any soil. Will produce about 80 bushels to the acre, and combines all the rich and nutritious qualities of the bearded sorts, and being beardless, is easily handled and can be fed to stock the same as Oats. By reason of the above facts this Barley is worth more money to the farmer, especially so when you consider that Barley weighs 48 pounds to the bushel, as against Oats 32 pounds, besides producing more bushels to the acre and selling for twice the money per bushel. Try it and you will be pleased with your bargain. Price per bus.

Gordinier's Spring Rye

The Most Remarkable Rye Now Under Cultivation.

A more profitable crop than Oats. Distinct from the Winter Rye, grain of finer quality and more productive; can be successfully grown in any latitude, and is now being largely sown in the Middle States in place of Oats, being a much more profitable crop, on account of the production of nearly four times the straw, and also as a "catch" crop, where Winter grain has failed. The straw is equally as valuable as that of the Fall and Winter Rye, standing stiff 3 to 5 feet high. Produces 30 to 40 bushels of grain per acre. As it does not stool like Winter Rye, not less than 2 bushels to the acre should be sown. Price per bus.

Gordinier's American Spring Wheat

The Greatest Spring Wheat in the World.

Glories in the distinction of being the only Spring Wheat doing well everywhere—East, South, West or North. Everywhere it pays to sow it. Long, finely-shaped heads, filled to the top with heavy kernels. This variety of Spring Wheat is the result of long and careful experimenting obtained through crossing and careful selection. The most prolific, heaviest-stooling, strongest-growing variety of Spring Wheat. The ear is very long and filled up to the point with fine, plump, reddish kernels. It is a great milling wheat and produces more of the choicest flour to the bushel than any wheat I know of, and this point alone makes it the greatest milling Wheat in the world. Price per bus.

Dawson's Golden Chaff Wheat

This variety has gained great popularity in the last few years on account of the large yields produced, and its hardiness and vigor and especially on account of its freedom from the attacks of the Hessian fly. Where the fly is troublesome there is no better kind to raise than this. For some reason the fly will leave the Golden Chaff Wheat alone while other kinds in the same or adjoining fields are destroyed by it. The plant is of great vigor and will succeed on almost any soil. The heads are quite long, bald and usually well filled with large, light, amber-colored grain of good quality. We have heard of very large yields from this Wheat and have had good success with it on our own farm. Yields of 38 to 45 bushels per acre are not unusual. We offer some first-class pure seed. Price per bus.

ERRORS

We sometimes make them; so does everyone! We will CHEERFULLY correct ours if you will write us. How can we correct them if you DON'T? Try to write to us good naturedly, but if you can't then write to us anyway. Don't kick to anyone else, or nurse a grievance. If we have ever made an error or offended you, it's only simple justice to us to let us know. We correct our mistakes gladly. If our methods don't appeal to you, help us with criticism from your point of view. It is inevitable that in business letters hastily written should sometimes rub the wrong way. We may be awkward in expressing ourselves, but our goods are honestly sold and we aim to give everyone a square deal.

A FIELD OF SOUTHERN MILLET. GROWN BY LANSING FONDA, COHOES, N. Y. 10 ACRES OF MILLET

MILLETS Very Important to Buyers of Millet

Common Millet is offered and sold by many dealers as German Millet. The seed bears sufficient resemblance to German Millet to deceive inexperienced purchasers, and to make the prices asked by other houses for the true German Millet seem unreasonable. Do not buy German Millet without the distinct and positive assurance that it is Southern-grown seed.

Millet and Hungarian

These are best used as catch crops to help out when pasture and other forage is short, or to occupy land which would otherwise be idle. A readily available crop for use in short rotations. Good to grow on foul land to rid it of weeds. An excellent nurse crop to sow (thinly) with Clover and grass in Midsummer. Do best on a fertile mellow soil which has had a liberal application of barnyard manure. If other fertilizers are employed they should be scattered on the ground after plowing and harrowed in as these plants feed near the surface. Stubble land may be disked and the seed harrowed in; $\frac{1}{4}$ to $\frac{1}{2}$ bushel seed to acre if drilled; $\frac{3}{4}$ to 1 bushel if broadcasted. Sowing may be done at any time after the ground is warm. May 20 to August 1. Sow thinly if seed is wanted, thickly if for hay or forage, as thin seedling results in coarse-stalked plants. Cutting for hay should always be made before the seed begins to ripen, and may be done at any time.

FIELD OF JAPANESE MILLET

HARVESTING SOUTHERN MILLET

Hungarian Millet Siberian Millet Southern German Millet Japanese, or Barnyard Millet

after the heads have formed. A second crop may sometimes be obtained when the seed is sown early and first crop cut as soon as the plants come into bloom. A fine quality of ensilage may be made by using Millet with some leguminous crop like Cow Peas, Soy Beans or Clover. Cutting for hay should be made when the ground is dry. Cut after the dew is off, allow the grass to lie in the swath until partially dry, then gather into stacks and let stand until thoroughly cured after the manner of curing Clover. Millet should not be fed to horses, as it sometimes causes serious injury.

Field of Southern Millet. Grown by Lansing Fonda, Cohoes, N. Y.

Cow Peas

The principal varieties grown in the Northern States are the Black and Whippoorwill, a brown striped Pea. Sow after the season for Corn planting, when the ground is thoroughly warmed. Most of the failures with this crop have resulted from sowing too early, the seed either rotting or the plants making but a feeble start, from which they never fully recover and often being choked out by weeds. The ground should be free from weeds and to make it so, should be harrowed two or three times at intervals of five to seven days before Peas are planted. Sow 1 to 1½ bushels per acre, if broadcast, and if drilled, 20 to 30 pounds. Cover 1½ to 2 inches deep. Drilling 30 inches apart and cultivating between the rows is the best method of culture. When the plants begin to run they should be allowed to cover the ground. May be sown with Oats for forage, one-third Oats, two-thirds Peas broadcast. As far north as Michigan Cow Peas have made a vine growth of 8 feet and root growth of 5 to 6 feet, and have matured over 30 bushels of seed per acre. Sown after early Potatoes are dug, the Peas will make fine feed in eight weeks. Will keep down the weeds and leave the land in splendid condition for any succeeding crop. This plant makes one of the best quick-growing cover crops to plow under for enriching the soil.

Cow Peas Sown June 16, Plowed Under August 31

New Era

These so-called "Cow Peas" are really a small Bean of strong running growth, with a large and abundant glossy dark green foliage. The vines may be cut either for feeding green or they can be cured for Winter use. They are also most desirable for ensilage; for this purpose the seed should be planted in the hills with field Corn, as the vines running up the Corn-stalks are easily harvested and the combination of Corn-stalks and Bean vines makes excellent ensilage. This variety is of extra strong growth and most productive of dry seed. Seed should not be planted until the trees are well out in leaf. For drills 3 feet apart use one-half bushel per acre, or 1 bushel broadcast, while planted in hills 4 by 4 feet with Corn, one-quarter bushel is sufficient. The earlier they can be sown in the Spring, the larger the crop of dry seeds can be produced, as the vines make a continuous growth until cut off by the frost. Price per bus.

Cow Pea-Whippoorwill

A very early-maturing variety of upright or bush growth. Ripening early, the crop may be harvested in time to plant Winter grain in the Fall, providing the seed can be planted by the middle of May. The seed is light brown speckled darker brown, of the same size and coloring as the eggs of the whippoorwill. Price per bus.

Buy Your Seed at WHOLESALE PRICES

If your dealer cannot furnish you with Gilt-Edge Seeds, send your order to us. We will give you the wholesale prices. Save one profit. Buy direct. Do not let your dealer sell you seed "just as good" as the Gilt-Edge Seeds. Don't be deceived. Remember all our seed is tested as to purity and germination.

Strictly Northern-Grown Seed

Showing sample of Vetch as grown in this county

Sand Vetch, Winter Vetch and Hairy Vetch

Michigan Sand Vetch is a very valuable forage plant and is rapidly becoming extremely popular as year after year the farmers of this country are learning more of its true value. It is noted for its extreme hardiness, is highly valuable in the north as a Winter cover crop to prevent leaching, is also valuable for forage and fertilizing purposes. It withstands hard Winters being harder than Wheat. It is an annual, but drops its seed freely and will come up year after year on the same ground. It does well on nearly all soils and is especially recommended for poor land, where it thrives and improves the soil wonderfully as it is very rich in nitrogen. It belongs to the Pea family but the vines are nearly twice as long and leafy as Peas. It may be sown in the Spring or Fall with any crop of grain. It remains green all Winter and is valuable for early pasturing as well as for fertilizing. It is extremely early and has enormous value for feeding purposes. Drought, heat, and cold do not affect it. It is eagerly eaten by all kinds of stock. The Washington Department of Agriculture estimates the value of an acre of this Vetch plowed under is equivalent to putting into the ground twenty to forty dollars worth of commercial fertilizer. When sown in August or September it covers the ground before Winter sets in and prevents washing of the soil during Winter and early Spring, which saves a great portion of mineral fertilizers contained in the soil which otherwise would wash out. When sown in April or early May it can be cut in July, the second growth affording excellent pasture during the Summer. The yield of green forage runs from twelve to twenty tons per acre. It is suited to any soil

and is valuable in this respect as it produces good crops on poor, sandy soils, while on good land it grows to a height of four or five feet and produces enormous crops. Every farmer in the United States who raises any stock should have a field of it, as it is much more nutritious than Clover and can be fed to any kind of stock with perfect safety. It is a rapid grower and thrives on little moisture. If raised for hay it should be left standing until some seeds have become well formed.

When we first started our stock four years ago the crop did not amount to much as we planted imported seed. The second year it did better and the third year still better, as it was becoming acclimated, and this year the yield which we got was truly wonderful. Very few seedsmen grow their Sand Vetch; most of it is imported. Sow thirty to forty pounds of seeds per acre, either broadcast or in drills. To get the best results from it sow about one-half bushel of Rye or Oats per acre with it to furnish support for the vine. Price per lb.

Vetch

Sorghum, or Sugar Cane

For Fodder.—Sow 1st to 15th of June, 10 pounds seed per acre and harrow to cover 1 to 2 inches. Harvest after first frost. Cut with selfblinder or mower and after 3 days' sun put up in large cocks and feed from field, or store in long 8-foot wide ricks, near feed lot. Yield, 8 to 10 tons per acre. Cows and all stock do well when fed on it as on grass. They will eat it up "slick and clean."

Sugar Cane is quite desirable to plant for green forage during the Summer months or for making ensilage. The stalks are tender and filled with rich sweet sap. The plant branches quite freely and will sprout out a second time if not cut too closely in the green state.

Broom Corn

(Twelve quarts to the acre.) Broom Corn succeeds in a good, deep soil, fresh but not damp; it is very sensitive to cold. Price per lb.

Improved Evergreen

This variety is extensively grown on account of the color and quality of its bush, which is long, fine, straight and always green; grows seven to nine feet high. Price per lb.

Early Amber

Early Amber

This variety grows from eleven to twelve feet in height, and where it can be planted by the first of May, the seed ripens almost invariably, affording an excellent food for stock and poultry. Seed should not be sown, however, until all danger of frost is over, as plants will make the most satisfactory growth during the warm weather. Price per lb.

Early Orange

Largely planted in the warm Southern States, where the season is longer than that required to mature the Early Amber. Price per lb.

STRICTLY NORTHERN-GROWN SEED—Continued

Kaffir Corn

This variety is entirely distinct from our common Indian Corn, and is especially desirable for planting where the Summers are hot and dry. The stout stalks grow stiffly erect, from six to ten feet in height, according to location and richness of the soil. The stalks and blades cure into an excellent fodder and are also desirable to furnish green forage during Summer months in light soils and dry locations. The seed is borne in a loose branching head ten to twelve inches in length at the top of the stalk, taking the place of the Tassel in the ordinary Corn. On good land the Kaffir Corn will yield fully fifty bushels per acre. It is highly esteemed for feeding to both stock and poultry. Price per lb.

Miscellaneous Grasses

Red Top

Herd's Grass. A very hardy native perennial grass, succeeding best on moist land. It accommodates itself to a variety of soils, however, even to quite dry situations and stands our hot climate admirably. It is, perhaps, the most permanent grass we have, and it enters largely into the composition of our best natural pastures. It remains green for the greater part of the year, and its long, trailing stems form a very close, matting turf, that is not affected by trampling. The seed, as usually sold, weighs 14 to 20 lbs. to the bushel, natural in the chaff, and 4 bushels of it would be required to sow an acre. (The absolutely clean or "fancy" seed offered weighs about 36 lbs. to the measured bushel, and 1 bushel or less of it is sufficient to sow an acre.) Price per lb.

Red Top

Kentucky Blue Grass

June Grass. One of the most widely distributed and valuable native grasses. It combines more points of excellence than any other sort. It is a true perennial, lasting indefinitely and improving every year. Its densely creeping root-stalks, spreading habit and smooth, even growth, fine texture and rich green color render it one of the very best grasses for lawns. It forms a close turf, starts very early in the Spring, and lasts till frost. It succeeds in almost any soil, dry, rocky, sandy or gravelly and stands long-continued dry weather and hot suns. It takes, however, two or three years to become well established, and should, therefore, be sown only in connection with other grasses. If the soil is especially suitable it will eventually crowd these out, and make the finest possible sward. It is one of our most valuable pasture grasses, very productive and nutritious. 3 bushels to the acre. (14 lbs. to the bushel.) Price per lb.

Blue Grass

Orchard Grass

Orchard Grass, as its name implies, is remarkably well suited for orchards as well as other lands. This grows as high as Timothy, and will produce two crops a year, and should be cut while in the first bloom, as it becomes woody very soon and loses its value for hay. When used for that purpose it should be sown alone. It is especially adapted to sheep pasture as sheep will leave other grasses for it. It will start earlier than any other known grass in the Spring, and if constantly pastured is a rapid grower. It is the best pasture grass known. On account of its growing in tufts, it is entirely unfit for lawn purposes. If sown alone, sow two bushels per acre. Price per lb.

Orchard Grass

Bromus Inermis

Drought defying, frost resisting. Yields enormous crops of splendid hay and affords early and abundant pasturage. It

adapts itself to almost every condition of soil and climate and to any use to which grass may be put, equaling in quality and rivaling in yield almost any other grass. The roots push through the soil and form fresh plants on every side. It bears up well under hot Summer suns. It will grow under conditions that are very dry, and it can also stand being covered with water, not deep, of course, for one or two weeks in the early Spring. It is an abundant producer of leaves and is much relished as pasture and hay. This grass may be sown at any time of the year when the ground is bare, but the best season is in the Spring, and with or without a nurse crop. If sown with a nurse crop that crop should be sown thinly. Fifteen pounds of good Bromus Inermis an acre is sufficient. It grows slowly for a time, hence the farmer should not be hasty in concluding that he has failed to get a stand of the grass. Price per lb.

Bromus

For Poultrymen

Gordinier's Sunflower—Mammoth Russian

Mammoth Russian. The plants produce very large heads which measure twelve to twenty inches in diameter and contain an immense quantity of large striped seeds which are highly valued as an excellent and cheap food for fowls. They eat it greedily, thrive well, and lay the greatest number of eggs. Small rations of the seed fed to horses and other stock during the Winter months are of great service to keep them in fine, healthy condition, imparting a sleek glossiness to the coat of hair. It will produce a good crop of seed even on thin poor land. Price per lb.

Does Your Dealer Buy His Seed in Car Load Lots? Ask Him!

When you buy seed from a dealer who buys less than car lots you pay one more profit—remember that. The dealer who buys less than a car load must buy his seed from the car load buyers and you pay one more profit. Buy your seed from us—we are only car load buyers. **SAVE THE MIDDLEMAN'S PROFIT!**

SPECIAL GRASSES

Our customers should bear in mind the importance of buying good Grass seed. There is an astonishing quantity of poor, dirty Grass seed sold. Many farmers will buy Grass seed where they can get the lowest price without regard to quality or purity. We have seen Timothy seed sold which contained over 9000 weed seeds to the pound, just because it was worth fifty cents a bushel less than good seed which contained no weed seed. Remember, all our seed is tested by the Government as to purity and germination. Write for prices on the following list of Special Grasses:

AWNLESS BROME GRASS (*Bromus inermis*). A hardy and productive grass, thriving on very dry, and poor soil, where most other grasses would not grow.

CANADA BLUE GRASS (*Poa compressa*). Thrives on poor, dry soil, and also on hardy, clayey ground; withstands extremes of drought or wetness; bears trampling well and remains green till Winter. A valuable grass for pastures.

CREEPING BENT (*Agrostis stolonifera*). Of rapid growth, fine texture and spreading habit. Forms a very close and permanent sod. Especially valuable for lawns.

CRESTED DOG'S-TAIL (*Cynosurus cristatus*). Thrives best on moist, rich soil, but accommodates itself to nearly all soils. Grows well in the shade. Valuable in moderate quantity for permanent pasture and lawns.

ENGLISH, or PERENNIAL RYE GRASS (*Lolium perenne*). Of rapid growth and productive; produces a strong growth in four or five weeks. Made into hay it is rather hard, but is very nutritious and is much relished by cattle and horses.

PERENNIAL RYE GRASS. Selected Dwarf. A selected short-seeded strain, suitable for the lawn. Makes a fine green turf in a few weeks.

FINE-LEAVED, or SLENDER FESCUE (*Festuca angustifolia*). A very fine-bladed grass, valuable for lawns; grows well in the shade and in dry, inferior soils. Is very hardy, lasts long and bears grazing well.

HARD FESCUE (*Festuca duriuscula*). A variety of Sheep's Fescue, of dwarfer habit; like that thrives on poor soil and is very hardy.

ITALIAN RYE GRASS (*Lolium Italicum*). Thrives on a variety of soils, producing early and large crops. Though a perennial, it is short lived and generally treated as an annual. Valuable for soiling. Sown in the Fall, will produce a large crop of hay the following season.

KENTUCKY BLUE GRASS (*Poa pratensis*). One of the most valuable grasses for pasture and lawn, requires some time to become established but lasts indefinitely on congenial soils. Much of the seed of this grass that is offered does not weigh over 14 lbs. to the measured bushel—the old standard weight—and even some offered as "fancy" does not weigh but 16 lbs. As noted, the two grades here offered weigh considerably more.

FANCY RECLEANED SEED. 19 lbs. to the bushel.

FANCY EXTRA RECLEANED. 21 lbs. to the bushel.

MEADOW FESCUE (*Festuca pratensis*). Largely used for permanent mowing mixtures. Though at once productive, it does not reach its full production for two or three years, when it surpasses most other grasses. Succeeds best on cool, moist soil, rich in organic matter.

MEADOW FOXTAIL (*Alopecurus pratensis*). One of the best pasture grasses; makes an earlier growth than any other variety, thrives best in low, moist land, but grows well on high, light soil and bears extreme Summer heat without burning.

ORCHARD GRASS (*Dactylis glomerata*). One of the most nutritious and valuable grasses, early, hardy and permanent and thrives in all soils and situations. Bears frequent mowing and constant cropping, and is very productive. Should be included in liberal proportions in most mixtures for both mowing and pastures.

RED, or CREEPING FESCUE (*Festuca rubra*). A creeping-rooted grass thriving in dry, poor soils. Forms a close, firm turf and is valuable for shaded lawns. Also valuable for gravelly banks and exposed hillsides.

RED-TOP (*Agrostis vulgaris*). Next to Timothy the most largely used grass; succeeds best on moist soil, but thrives well on a variety of soils, and is valuable for permanent mowing, pastures and lawns. **Recleaned or Fancy.**

RHODE ISLAND BENT (*Agrostis canina*). Of fine growth, forming a close and permanent sod. One of the best lawn grasses and desirable for pasture mixtures.

ROUGH-STALKED MEADOW GRASS (*Poa trivialis*). Thrives on moist, rich land. Valuable for both meadows and pastures, but should be used only in mixtures. Especially desirable for shaded lawns.

SHEEP'S FESCUE (*Festuca ovina*). Of dwarf but thick growth; thrives on dry uplands and in poor, sandy or gravelly soils where other grasses would fail. Valuable for pasture mixtures.

SWEET VERNAL (*Anthoxanthum odoratum*). Used in small quantity in both meadow and pasture mixtures on account of its pleasing fragrance, and is especially desirable for the pasture because of its both early and late growth. True perennial.

TALL MEADOW FESCUE (*Festuca elatior*). On strong, moist, or clayey soils, very productive and permanent. Very nutritious, readily eaten by all stock; should form a part of all meadow and pasture mixtures for moist soil.

TALL MEADOW OAT GRASS (*Avena elatior*). A very hardy species, making an early and luxuriant growth and continuing to grow until late in the Fall and is, therefore, especially desirable for pastures. It makes good hay and, when used for soiling, can be cut several times in the season.

TIMOTHY (*Phleum pratense*). More largely used than any other grass but often when other varieties would be more profitable. 45 lbs. to the bus.

Gilt-Edge Grade. Heavy recleaned seed, guaranteed 99½ per cent. pure.

VARIOUS-LEAVED FESCUE (*Festuca heterophylla*). Of early growth and permanent, thriving best in cold, moist land, rich in humus and potash. Grows well in the shade. Valuable in mixtures for permanent pastures and shaded lawns.

WOOD MEADOW GRASS (*Poa nemoralis*). A very early, hardy and permanent species, valuable for shaded lawns and permanent pasture mixtures.

More and Better Corn

FINE SEED FOR THIS YEAR

We have an exceptionally fine lot of Pedigreed Corn this year. We can supply our customers much better than last year as we were out of certain kinds of Corn long before the season was over. Order your Pedigreed Seed Corn early this year and insure good stock.

MORE AND BETTER CORN. These pictures tell the story

Buy your Pedigreed Seed Corn from Gordinier's Big Country Store.

Why It Pays to Buy Pedigreed Seed Corn

GORDINIER'S PEDIGREED SEED CORN — THE GILT-EDGE KIND
A well-filled ear with kernels of good depth. Will give large percentage of corn to cob.

WHAT IS SOLD TO-DAY BY MOST DEALERS AS HIGH GRADE CORN
The reverse is shown here. No up-to-date corn grower will tolerate such corn for seed

GILT-EDGE SEEDS

Can only be bought from Gordinier's Big Country Store. ✱ ✱ This Brand is registered at Washington.

OUR GUARANTEE

We guarantee our corn to be pure bred, perfectly matured, and of highest germinating powers. We guarantee it to go out in first-class condition. We carefully examine each ear. Now, if any seed is received from us and is not satisfactory in every respect it may be returned at our expense and money will be refunded. All corn may be kept ten days and tested in any manner and if for any reason it is not satisfactory it may be returned and money refunded.

THIS PICTURE SHOWS THE VENTILATORS
One of the hot air furnaces used to prevent freezing in the house and to prevent dry ventilation in dry weather

ONE OF THE VAULTS WHERE WE STORE PART OF OUR CORN
Showing the hot air shafts. Corn is within 2½ feet of air at any point

PICKED IN A SACK

This is the way we pick our corn that we dry before husking time: Going down the corn rows picking the finest ears and placing them in sacks, dumping the sacks at the end of the rows into crates and hauling to the seed house.

A HANGER OF CORN

These Pictures Tell The Story

Why We Have Good Seed Corn

Corn is the most important crop in the world. It pays bigger than any crop in the United States. Do you grow the best? These pictures tell the story why pedigree corn costs more. We believe real photographs will tell the story for us better than words.

Read This Table— It Will Make You Think

Good seed and good soil pays. Ten acres equals forty of common corn. Figure this out for yourself and be convinced.

Land being worth \$150.00 per acre and money 5 per cent., ten acres of corn yielding 80 bushels shows as much profit as 40 acres yielding 50 bushels.

	Ten Acres		Forty Acres	
Yield.....	800		2000	
Worth at 35c.....		\$280.00		\$700.00
Interest on money invested at 5.....				
per cent.....	\$75.00		\$300.00	
Taxes at 50c. per acre.....	5.00		20.00	
Cost of growing.....	40.00		160.00	
Cost of husking and marketing.....				
grain.....	40.00		100.00	
Total expense.....		160.00		580.00
Net profit.....		\$120.00		\$120.00

DRIED ON A RACK

This picture shows one of the sides of the driveway with the corn drying on the wire racks all of which are supported from above. Notice that each ear is separate and that no two ears are touching.

Gordinier's 90-Day— Earliest High Yielding Corn

The average yield per acre of this variety has steadily increased until this year we have several fields which yielded over 80 bushels per acre and which were two weeks earlier in maturity than any other variety. This variety becomes very profitable as a feeding Corn for the reason that it is sufficiently mature for that purpose early in September. In extreme northern districts, where frost may be expected about the 25th or 30th of August, this Corn has no equal for silage purposes. We have bred 90-day Corn not to produce large ears but rather to increase the average number of ears per stalk. In this way we have held the Early Maturity, but have also increased the yield per acre. We recommend this variety for late planting in wet districts where excessive rains or floods have delayed the season. When planted the first week in June it matures before frost and produces a heavy yield of Corn, and fodder. Considering the quality of both Corn and fodder produced by this variety, we do not believe there is any Corn that can compare with it for the use of the man who feeds silage to dairy cows. Price per bus.

Reid's Thoroughbred Yellow Dent

If any seed grain can truly be called pedigreed, the Reid's Yellow Dent Field Corn is certainly entitled to be known as such, as its history dates many years back. It has been bred up and selected with painstaking care to what is at the present time one of the best varieties of Yellow Corn grown. Ear medium in size, remarkably uniform, and of a bright yellow color, with solid, deep grain and small

LEAMING CORN—Our Big Seller

red cob. Has from 18 to 24 rows of kernels on the cob, 50 to 60 grains in the row, and is well filled over the ends, and especially the butt, leaving a small shank, which makes it a great favorite with huskers. Best shredding sort, as it shatters the least of any by actual test. In some of the principal Corn-growing States of the West it has no equal and reports from many other States are very flattering. The Iowa Experiment Station report of 1901 gave the Reid's Yellow Dent an average of 100 bushels per acre, while the Agricultural Students' Union of Ohio in 1903 gave it a yield of 14 per cent. above all other varieties. As a winner of prizes from the World's Fair at Chicago in 1893, and at Western Corn carnivals and shows down to the present time, it stands at the head. Price per bus.

HARVESTING GORDINIER'S LEAMING CORN. 13 ft. high. Grown by Geo. Dunham, Schaghticoke, N. Y.

LEAMING CORN. GROWN BY KEYS BROS., TROY, N. Y. TAKEN SEPT. 27, 1912

Gordinier's Gold Standard Leaming

In confining our offerings of this variety to one strain, we believe we are placing before you the best blood of the Leaming Corn that

has so far been produced. We have changed the general type of this variety, breeding it richer in color, longer in kernel, and somewhat rougher in seed coat. We have greatly increased its yielding capacity and have increased the oil and protein content until it has become an Ideal Feeders Corn. The ears are from 8 to 11 inches long, $7\frac{1}{2}$ to 8 inches in circumference, weighing from 12 to 17 ounces each. The stalks range from 9 to 12 feet in height, with many large, broad leaves, making it the finest Corn for silage. The man who feeds cattle cannot afford to be without this variety. The medium rough kernel, containing the highest percentage of oil and protein, makes it the most perfect Corn for feeding purposes that has been offered by any seedsman. Price per bus.

GORDINIER'S BIGGEST SELLER—PEDIGREED LEAMING CORN

Gordinier's Evergreen Sugar Corn for Green Fodder

Many farmers prefer this for ensilage purposes, owing to the large percentage of saccharine matter in the stalks. The seed offered is specially grown for fodder purposes, being of quick growth and early maturity. Sown at the rate of 2 bushels per acre in drills 4 feet apart, it makes splendid stalks 6 to 8 feet high, which are of the finest quality for feeding green, cutting for ensilage or curing for fodder. Price per bus.

Leaming Corn, grown in Rensselaer County, 1912

Field of Leaming Corn, grown by Geo. Dunham, Shaghticoke, N. Y.

Field Inspection of Gordinier's Pedigreed Seed Corn

This picture tells the story. Send your Seed Corn order this year to the Big Country Store

EUREKA CORN. GROWN BY KEYS BROS., TROY, N. Y. FROM GORDINIER'S EUREKA CORN TRUE STOCK. TAKEN SEPT. 27, 1912

EUREKA ENSILAGE CORN

Genuine Stock

Big yield. Produces more Ensilage than any other Corn.
We have the true stock.

Eureka Corn, which is grown extensively around here for stock and foliage, outyields all other varieties in height and foliage. We cannot recommend this variety too highly to people who have silos. A great many of our customers take one field of Eureka Corn and one of Leaming or Pride of the North, which will mature in this section, thus insuring them more ensilage. Eureka Corn will not mature in this section, but is the tallest and most leafy of all Corns. Gordinier's True Eureka Corn, price per bus.

Iowa Gold Mine Ensilage Corn

The deepest grained, purest yellow Corn in existence. The Corn that has put thousands of good gold dollars into the pockets of our farmers and dairymen. The Iowa Gold Mine Corn is giving such eminent satisfaction that we again give it the place of honor in the Corn family. It puts gold dollars in the pockets of all who use it. I can only repeat what I said about it in 1908.

This magnificent variety of Corn will grow 14 feet high and matures with our field varieties. It has the largest kernel and smallest cob of any Ensilage Corn known. The grain value of this wonderful variety is about double that of the Leaming or Pride of the North with their immense cobs and small kernels. It is everything that the Pride of the North and Leaming can possibly be, with the great grain-producing quality added. There you have it in a nutshell. It is the biggest milk and money producer on the American continent. We have decided to offer it this season on the ear also, as many of our farmers have expressed a desire for it. Price per bus. shelled.

Gordinier's Pride of the North Corn

This variety of extra early Seed Corn, which was originated some twenty years ago in northern Iowa, has sprung into prominence until now it is considered by many to be the best early Dent Corn grown. It is a strong, hardy, vigorous grower from the day it is planted and has yielded excellent crops when planted as late as July 4th. The ears, which are from 8 to 10 inches in length, have 14 to 16 rows of deep yellow kernels, closely set together on a small red cob and fully twenty-five per cent. of the stalks bear two good, sound ears. This Corn is an excellent variety to plant for early feeding, as it can be ground almost as soon as picked, and can be planted thicker in the hill and at the same time bear full-sized ears. Pride of the North is especially adapted for planting in high latitudes and will mature a crop further North than any of the other Dent Corns and can always be depended upon to mature a crop of good sound Corn. It ripens earlier, dries out quicker, makes better fodder, stands drought better, and will yield more No. 1 shelled Corn to the acre than any other early variety, and at the same time brings a higher market price. Stockmen will find this Corn invaluable in times of scarcity of early fodder as it can be cut and put away long before any danger of frost and is extensively grown on land to be cleared early for sowing Fall Wheat. Price per bus.

Gordinier's Improved Early Sheeptooth

Nearly two weeks earlier and better adapted for fodder and ensilage in the Northern States than the ordinary Southern Sheeptooth. The stalks are 12 to 14 feet in height, and enormously productive. This improved sort is generally superseding all known varieties for ensilage purposes. Price per bus.

Field of 8-rowed Yellow-Flint Corn grown on the farm of the B. Cooper Ice and Coal Co., Troy, N. Y.

FLINT VARIETIES

Nearly all Flint varieties shipped on ear, bus. 72 lbs. Special prices on large quantities. In this list the planter will find all that is best in field varieties.

Plant the Best. It Costs Only a Few Cents an Acre More.

Corn is the most important of all farm crops, not only in quantity, but in value. More acres are devoted to the growing of Corn than any other crop. My Corn is grown for seed, not for feeding or milling. The seed stock is carefully selected, the growing crop is given attention, and the Corn is carefully sorted before shelling. This is why my Seed Corn costs more than milling Corn. You can't afford to plant common Corn of uncertain variety and vitality, even if it should not cost you a cent. You had better pay, if necessary, \$5.00 a bushel, or even more for High Bred Seed Stock. The value of the average Corn crop can be more than doubled by planting my High Grade Seed of improved varieties.

Gordinier's Improved Twelve-Rowed Corn

Twelve-rowed Corn yields more per acre than 8-rowed. The ears are larger in circumference and have more Corn on them. For this reason, leading dairymen are planting it for the silo and for early feed. Twelve-rowed Flint is a selection from the well-known Longfellow Flint or Yankee Corn. It is just as early as Longfellow and has the same beautiful, clear yellow color. The one objection to Twelve-rowed in the past has been that the ears were too short. By careful selection, we have materially lengthened the ears, so that now we have it nearly as long as the original Longfellow. All the stock we offer is home grown and very choice. Price per bus.

Early Longfellow Flint

The most popular of all Flint varieties. It is a beautiful 8-rowed yellow Flint, with slender, straight ears, 10 to 15 inches long. Kernels are large and wide, and cob very small. Ripens in 75 to 85 days and very prolific. Well adapted to the Northern States, and largely grown in Wisconsin and Minnesota. Price per bus.

(Our stock is Nebraska grown and is all shelled.)

Sanford's White Flint

The ears are of unusual length, 12 to 15 inches, smooth and symmetrical in shape, of a flinty-white color. Makes a very sturdy, vigorous growth, with broad and succulent leaves. Stalks usually have 2 or 3 ears each. Price per bus.

Early White Flint

It is the earliest and best White Flint variety grown. In many respects, resembles the Longfellow, but it is a white Corn. The ears are long and slender, grain rather small, plump, and cob is well filled. In many sections farmers will not grow any other variety. I have found that it is known under several names in different sections. It is a very prolific variety, stalks producing two to three ears. If you want a White Flint Corn, you cannot get a better variety. Price per bus.

8-Rowed Yellow Flint Corn

Mammoth Eight-Rowed Early Yellow Flint Corn

Is the best Flint Corn, either for crop or silo in cultivation. It is the largest variety grown. The stalks average 8 to 10 feet in height, each stalk carrying from one to three ears. It leaves profusely, nearly to the ground, and both the leaves and stalks are sweet. Mammoth Yellow Flint produces more and longer ears than does any other variety. The ears average from 10 to 18 inches in length. Another remarkable feature of this Corn is that it is early, being fully ripe and ready for the knife within 100 days from date of planting. Summing up the good qualities of this Corn, will say: First, that it is the earliest field Corn grown. Second, it is the largest growing Flint Corn in cultivation, as far as growth of stalks and leaves are concerned. Third, it grows larger ears and more of them than any other variety in cultivation. Fourth, the entire plant, stalks and leaves are sweet, and stock will eat this fodder closer, either in the form of

ensilage or dry fodder, than the stalks of any other Corn grown with the exception of Sweet Corn. All my stock is grown from carefully selected seed. The seed I furnish my customers is from hand-picked ears ten inches in length or over, thoroughly dry and cured before shelling. Price per bus.

FILLING A SILO WITH GORDINIER'S CORN

Improved Smut Nose Corn

A fine well-known 8-rowed Flint variety, largely grown in the Eastern States. Ears are from 10 to 12 inches long, $1\frac{1}{2}$ to 2 inches in diameter. Rows straight and even, filled to the tip with medium-sized kernels. Will mature in 80 to 90 days from time of planting, according to soil and season. A sure cropper on poor land. Price per bus.

King Philip Flint

A very early 8-rowed Red Flint. Ripens in 80 days. Stalks are very leafy, splendid for feeding green or for silage. Extremely hardy and a good cropper on poor land. Price per bus.

Maine Grown Seed Potatoes

Change Your Seed

Maine crops are thoroughly sprayed with Bug Death, keeping them green and growing and free from bugs, blight and rust germs until full maturity, allowing the seed to mature. No Paris green or arsenic used on crops.

The necessity for changing Potato Seed often is universally admitted by all well posted growers, but too seldom practiced, especially when the best seed can be had at so little additional outlay. We were never in better shape to supply Choice Stock, True to Name, and Northern Grown, than we are this season.

Any good soil will produce Potatoes, but a sandy loam is best. Make furrows of good depth, 3 feet apart; drop the cut-seed pieces about 8 or 10 inches apart. If grown in hills, one or two pieces of Potatoes, containing one or more eyes in each piece, are placed in each hill, which are made 3 feet apart each way. Cover the seed four inches, but not so deep in wet, cold land. When the sprouts appear, cultivate and hoe to keep the soil free and clear of weeds. As the vines increase, draw earth around them, forming a slight ridge. Just as soon as the bugs appear use Bug Death. One peck will plant about 100 feet of row, or 100 hills. Ten bushels are required to plant an acre.

By planting our Northern Grown Seed you are assured of Early Maturity, Increased Yield and a Vigorous Growth. To produce healthy stock we use first-class potato land, nothing but pure, well-matured, good-sized seed. The seed Potatoes are very carefully handled when digging and barreling, that they may not be bruised or otherwise injured. Our seed Potato stocks should not be com-

CLYDE POTATO

pared with Potatoes picked up on the market, named at a guess, and sold for seed.

Order seed Potatoes early. We would most earnestly request our customers to send in their orders early. We then book and fill them in the order received. By so doing you take very little risk in getting what you want, as compared with waiting until the last moment.

Harvesting Gordinier's Seed Potatoes in Maine

Early Varieties

Early White Albino

This wonderful early Potato is a good cropper. The skin and flesh are extremely white, of exceptionally good cooking quality and very prolific, fully as early as the old Early Rose in maturing, and particularly valuable for the early market by reason of its fine shape and early maturity. The vines grow erect and it is one of the best early varieties to withstand blight and disease. One other good quality of this wonderful Potato is its great keeping quality. Plant some of these on good soil and give them good cultivation. It will pay you. Price per bus.

Gordinier's Troy Market

One of the best extra early pink varieties. A strong grower, dark vines of fine quality. This sort should be given a trial. As stock is limited this sort is sold only by the pound. Price per lb.

Norcross Potato

Medium-Early Varieties

Snow (White)

Sometimes called Poor Man's Friend

On account of the large yields that have been reported of this Potato it is rightly entitled to be called the "Poor Man's Friend." It is of handsome shape and most desirable for the best trade. It is a vigorous grower, ripens uniformly, a little later than Green Mountain, is a good keeper and fast becoming one of the most popular medium late varieties. The vines are always very heavy, the seed being especially vigorous and tubers always good size where soil is well tilled. Our customers will find the Snow a very reliable Potato. We can furnish nice stock while the supply lasts. Price per bus.

Star of East

One of the best medium early sorts. Good cropper. Price per bus.

Irish Cobbler Potato

A comparatively new and very fine early variety, extensively grown for market in some localities. The tubers are very handsome, almost round, averaging uniform in shape and size. Flesh white, and of excellent quality, skin cream and buff with whitish netting. This is a very reliable variety and heavy cropper. Price per bus.

Snow Potato

LATE VARIETIES

Norcross Pure White

Originated in 1895. Seed boll grown on the old Early Rose pollenized with Beauty of Hebron. Singular as it may seem, this Potato is one of the late maturing varieties, somewhat blocky in shape, smooth surface, very excellent table quality, cooking dry and mealy. Grows a thrifty, upright top, with large leaves, and is above the average of the white kinds to withstand blight. It has a wonderful reputation in New England and New York State for its superior quality and large yield. Price per bus.

Our big seller

Notice.—We carry in stock many other varieties and if you will write we will send you full descriptions and prices. H. W. G.

Green Mountain, Jr., New White Seedling

Originated by W. E. Johnson in 1905. An inbred Green Mountain; seed boll grown on Green Mountain and pollenized with Green Mountain. It is practically thoroughbred or pure bred. It has all the parents' good qualities and in general appearance is the same, except it is a trifle whiter in color and the skin more netted. It grows round to oblong, somewhat flattened; eyes shallow. The sprouts in Spring are white and stubby and do not grow very long. Soon after the stalks appear above the surface they branch very much, the broad, dark green leaves lying close to and completely covering the ground, which will kill weeds and grass and have a tendency to hold moisture. It will make a vigorous, rapid growth, set a large number in the hill and mature to the best marketable size a few days earlier than its parents. Blossom is white, with yellow center stalks. Cooking quality excellent. In 1908 on our trial grounds it gave a yield at the rate of 640 bushels per acre. In 1909 two hills produced 31 Potatoes. Price per bus.

SPECIAL and STANDARD EARLY and LATE VARIETIES

Early Johnson
Early Rose
Early Norther

New Queen
Early Eureka
Green Mountain

Delaware
Carman
Bovee

Star of the East
Red Bliss

Vermont Gold Coin
American Giant

Planters generally are familiar with the characteristics of the varieties listed above. If you desire to know about some of these standard sorts we will be pleased to impart such information as we possess upon request.

MATERIALS FOR SPRAYING AND DUSTING

We have in stock Bug Death, blue vitriol, lime, etc., and our prices are right. We are agents for O. K. Champion Potato Machinery and the Hoover Potato Digger. Special catalogue on request.

Write for Big Poultry Catalogue.

Harvesting Gordinier's Seed Potatoes with a Hoover Potato Digger

HIGH GRADE STANDARD FERTILIZERS

H. W. Gordinier & Sons Co. are the largest dealers in high grade Fertilizer in northern New York. Buying in carload lots, we can make you a very attractive price. Write us to-day.

2515 bush. Potatoes from 5 acres on Bradley's Fertilizer

Mr. Emery C. Cobb, Penobscot Co., Maine, writes: "I am sending you photograph of my Potato field, showing a yield of 572 bus. on a measured acre. The 5-acre field averaged 503 bus. to the acre. These Potatoes were grown wholly on Bradley's Complete Manure, one ton per acre. In 1900 it was a worn-out field cutting less than one-half ton of hay per acre. Since then under a rotation of crops it has been in Potatoes three different years and has never produced less than 500 bus. to the acre. During this time this field has never received any kind of dressing except Bradley's Fertilizer and none of the crops in the rotation has been dressed except the Potatoes. The whole amount was applied at the time of planting."

Why "experiment" when Bradley's produces results like this?

Bradley's Superphosphate

Guaranteed Analysis for N. J. only

Nitrogen.....	2.47 to 3.29	per cent.
Equal to Ammonia.....	3 to 4	per cent.
Soluble Phos. Acid.....	7 to 8	per cent.
Reverted Phos. Acid.....	2 to 3	per cent.
Available Phos. Acid.....	9 to 11	per cent.
Insoluble Phos. Acid.....	1 to 2	per cent.
Total Phos. Acid.....	10 to 13	per cent.
Potash (K ₂ O).....	2 to 3	per cent.
Equal to Sul. Potash.....	3.70 to 5.55	per cent.

Bradley's Superphosphate is composed of the very best quality of plant-food materials, selected with especial reference to their *crop-producing* powers, combined in such proportions as the practical experience of over thirty years has demonstrated will produce the best results. It is sold solely upon its *merits*, and needs no bolstering with "comparative tests" or unofficial "analyses" so often used to catch the unwary. It is in every sense a *complete* fertilizer and produces the largest crops of the finest quality without the use of stable manure.

Its mechanical condition is unequalled, being fine and dry. It therefore drills perfectly in any machine. Its plant-food is so *fixed* in chemical combination that it never deteriorates by age.

The continued use of Bradley's Superphosphate for long terms of years by successful farmers throughout the country and its yearly increasing sales, prove conclusively that it is all it is represented to be, and the acknowledged standard fertilizer of the country. In quality, condition and value it never varies; it is, therefore, "always reliable."

Bradley's Complete Manure for Potatoes and Vegetables

Guaranteed Analysis for N. Y. and N. J.

Nitrogen.....	3.29 to 4.12	per cent.
Equal to Ammonia.....	4 to 5	per cent.
Soluble Phos. Acid.....	6 to 7	per cent.
Reverted Phos. Acid.....	2 to 3	per cent.
Available Phos. Acid.....	8 to 10	per cent.
Insoluble Phos. Acid.....	1 to 2	per cent.
Total Phos. Acid.....	9 to 11	per cent.
Potash (Actual).....	7 to 8	per cent.
Equal to Sul. Potash.....	12.94 to 14.79	per cent.

Specially Adapted to Intensive Farming and Market Gardening

This manure is one of the richest and most concentrated fertilizers sold, as has been abundantly proved by actual results in the field. It is manufactured from the very best plant-food materials obtainable. In mechanical condition it is unequalled, and drills perfectly in any machine.

It is based upon exhaustive field tests, and not upon theoretical experiments of the laboratory, that common fault of "special crop fertilizers," in which common sense and practical experience are sacrificed for the sake of theoretical hobbies.

All of Bradley's Complete Manures are, in the fullest sense, "complete" fertilizers, and the several grades furnish complete plant-food in the best forms for all crops grown.

Directions for using Bradley's Fertilizers

Generally speaking, the following directions may be adhered to when using any of our fertilizers, when the soil is in good condition and in connection with manure. If the land, however, has shown signs of becoming exhausted from continued cropping or if no manure is used, we recommend twice the quantities named, because if a large crop is to be expected one should apply fertilizer enough to feed it, otherwise how can it mature? Is it not good insurance to apply too much and secure a crop, when by applying too little you are apt to get none at all, thus losing the seed, labor, fertilizer and use of the land?

If sowing broadcast much more fertilizer is required than if drilled.

Of any of our brands for oats and barley use 300 to 400 pounds per acre, drilled.

For wheat, sowed corn and millet, use 250 to 500 pounds per acre, drilled.

For grass, as a top dressing, use 200 pounds in the Fall and 300 in the Spring. When seeding to grass with wheat, oats, etc., remember that all fertilizer not taken by the grain remains for the meadow, so an extra allowance should be given.

For corn and hill crops sow broadcast or drill 500 pounds per acre, and use a tablespoonful well scattered in the hill, slightly covered with earth, before dropping the seed.

The following special crops pay well for good fertilizing, and the question should be, "How much fertilizer can I use to advantage?" rather than, "How little can I get along with?"

Bradley's Alkaline Bone with Potash

Guaranteed Analysis for New York

Soluble Phos. Acid.....	9	to 11	per cent.
Reverted Phos. Acid.....	2	to 3	per cent.
Available Phos. Acid.....	11	to 13	per cent.
Insoluble Phos. Acid.....	1	to 2	per cent.
Total Phos. Acid.....	12	to 14	per cent.
Potash (Actual).....	2	to 3	per cent.
Equal to Sul. Potash.....	3.70	to 5.55	per cent.

Guaranteed Analysis for Penn. and N. J.

Soluble Phos. Acid.....	8	to 10	per cent.
Reverted Phos. Acid.....	2	to 3	per cent.
Available Phos. Acid.....	10	to 12	per cent.
Insoluble Phos. Acid.....	1	to 2	per cent.
Total Phos. Acid.....	11	to 14	per cent.
Potash (Actual).....	2	to 3	per cent.
Equal to Sul. Potash.....	3.70	to 5.55	per cent.

Our materials are selected with special reference to their *crop-producing* powers, and many of them are prepared by processes controlled exclusively by us. The formulas on which our fertilizers are manufactured are the result of exhaustive experiments on our own extensive farms in different parts of the country, which furnish unequalled opportunities for testing the relative merits of all kinds of plant foods, on a great variety of soils and crops.

Bradley's Soluble Dissolved Bone

**Guaranteed Analysis for N. Y., N. J.
and Penn.**

Soluble Phos. Acid.....	12	to 14	per cent.
Reverted Phos. Acid.....	2	to 3	per cent.
Available Phos. Acid.....	14	to 16	per cent.
Insoluble Phos. Acid.....	1	to 2	per cent.
Total Phos. Acid.....	15	to 17	per cent.

Our fertilizers are the direct outcome of nearly *fifty years of actual experience* in testing all forms of plant-food upon all kinds of crops and are consequently free from the uncertainties and risks attached to mixtures formulated upon theory or inexperience. We manufacture fertilizers for all classes of crops based on this exhaustive experience.

Bradley's Potato Fertilizer

Guaranteed Analysis for N. Y., N. J. and Penn.

Nitrogen.....	2.06	to 2.88	per cent.
Equal to Ammonia.....	2½	to 3½	per cent.
Soluble Phos. Acid.....	6	to 7	per cent.
Reverted Phos. Acid.....	2	to 3	per cent.
Available Phos. Acid.....	8	to 10	per cent.
Insoluble Phos. Acid.....	1	to 2	per cent.
Total Phos. Acid.....	9	to 11	per cent.
Potash (Actual).....	3	to 4	per cent.
Equal to Sul. Potash.....	5.55	to 7.40	per cent.

Introduced to meet the call for a reliable potato fertilizer at a moderate price. It has given better results than any other brand of its class, producing large crops of fine quality potatoes. It is finely ground, and its superior mechanical condition ensures even distribution.

Bradley's Patent Super- phosphate

Guaranteed Analysis for N. Y. and N. J.

Nitrogen.....	2.06	to 2.88	per cent.
Equal to Ammonia.....	2½	to 3½	per cent.
Soluble Phos. Acid.....	6	to 7	per cent.
Reverted Phos. Acid.....	2	to 3	per cent.
Available Phos. Acid.....	8	to 10	per cent.
Insoluble Phos. Acid.....	1	to 2	per cent.
Total Phos. Acid.....	9	to 11	per cent.
Potash (Actual).....	1½	to 2½	per cent.
Equal to Sul. Potash.....	2.77	to 4.62	per cent.

A High-Grade Complete Fertilizer for General Use on All Farm and Garden Crops, Either With or Without Barnyard Manure

Bradley's Patent Superphosphate, the pioneer of the fertilizer industry in the United States, has been more extensively used than any other brand of fertilizer in the world.

From its unvarying quality and uniform condition it has gained the name that more plainly bespeaks the estimate in which it is held among the farmers than volumes of praise—"the *Old Reliable*."

To the constant attention paid to the selection and preparation of the materials used in its manufacture is due the enviable reputation it has so long maintained for superior crop-producing powers and unequalled mechanical condition.

As it is a *complete* fertilizer, rich in available phosphoric acid, ammonia and potash, it can be used either with or without barnyard manure.

What Bradley's Fertilizer will do on Corn

Wizard Brand Sheep Fertilizer

A Wagon Load in a Bag

This produce comes from the Chicago Stock Yards, the largest live stock market in the world. Five million sheep come to this point every year and are kept in great barns until shipped or billed, and the manure is never exposed to the weather; no chance to lose or leach its strength and is gathered up and taken to the plant each day, where it is prepared for shipment. Wizard Brand Sheep Manure is carefully selected, kiln dried, screened and passed over strong magnets, pulverized and packed in barrels or bags.

Over ten carloads of Wizard Brand Sheep Manure sold in 1912

Use Wizard Sheep Manure on all crops.

Sheep Manure for the Vegetable Garden.—"Wizard" Brand in the vegetable garden is most practical and valuable, because garden soil becomes impoverished quickly, and quality, size and flavor of all that it produces are sacrificed. Fresh, crisp garden dainties, home grown and gathered, are well worth the effort and small expense required to renew and fortify the soil with just the elements which give so much in return.

Application.—The same quantities recommended for the lawn may be used to advantage in the flower and vegetable garden. It is preferable to apply one-half of the manure over the surface and spade it under, then scatter the balance and rake it in thoroughly just before planting. Shrubs, perennials, vines, etc., may be treated to an application around the base and the soil raked and pulverized thoroughly. This treatment has proven so universally satisfactory and pleasing that it may be followed with every assurance of success.

For Fruits.—When used for Grapes, Melons, Peaches and all fruits, whether tree, vine or bush, "Wizard" Sheep Manure is unexcelled and doubles the crops.

For Corn and Potatoes.—Can either be used broadcast or by applying directly to each hill (apply two handfuls to a hill).

"Wizard" Brand in the Orchard, Berry Patch and Truck Garden.—"Wizard" Sheep Manure in bags is the most concentrated and economical form for mulching and top dressing the orchard, berry patch and truck garden. Experienced growers are rapidly realizing the necessity of maintaining the fertility of their soil by the continual use of manure regardless of any other concentrated fertilizers they may apply to force rapid growth.

For Oats, Buckwheat, Rye and Wheat.—What one of our customers has to say about Sheep Manure on Oats: "In regard to the 'Wizard' Brand Sheep Fertilizer I purchased from you this Spring, I beg to say that it proved highly satisfactory, indeed, I would rather have it than any other fertilizer I know of. I drilled in the fertilizer with the Oats (Gordinier's Sensation) and from eighteen and one-half bushels I harvested more than 300 bushels."

Analysis per Ton of Manure of Different Animals

	Nitrogen, per cent.	Phos. Acid, per cent.	Potash, per cent.
Sheep.....	.768	.391	.591
Calves.....	.497	.172	.532
Pigs.....	.840	.390	.320
Cows.....	.426	.290	.440
Horses.....	.490	.260	.480

Moreover, this same Government Bulletin says of sheep manure: "Sheep manure contains a small amount of water and is, weight for weight, the richest manure produced by any of the common farm animals."

Here is another important consideration in favor of sheep manure. It is a fact often lost sight of in practice that the urine of animals is by far the most valuable part of the excreta. Now "Wizard" sheep manure is gathered daily from covered sheds and none of the nitrogen is lost.

Prices "Wizard" Brand Sheep Manure

Per pound.....	\$0.05
5-pound package.....	.25
25-pound bag.....	.75
50-pound bag.....	1.00
100-pound bag.....	1.75
1 barrel (about 200 pounds).....	3.75
1 barrel (about 200 pounds) delivered free to nearest freight station.....	4.00
500 pounds.....	7.00

Special prices on ton lots

LIME

Good for All Crops. It's up to you to use it.

How to Determine What Soils Need Lime.—1st. Those soils on which, when seeded, clovers fail to thrive, and where sorrel grass, plantain and moss come in abundantly together with red top, almost always need liming.

Sour Soil.—When soil becomes sour the bacteria which converts the unavailable matter into plant food cannot live, and the soil becomes practically dead and unproductive. Lime will neutralize or sweeten the soil and make favorable conditions for the bacteria, to work and put life in it again.

Causes of Unproductive Soil.—The principal causes of unproductive soil are: 1st. Lack of humus. 2nd. Soil becoming sour, or lack of lime. 3d. Lack of available plant food. More land in certain parts of our Eastern States is unproductive on account of the humus and lime being exhausted than from any other cause; it is evident, then, that to restore it to its original fertility, humus must be supplied and if it is sour, it must be sweetened or neutralized.

How Land Lime is Made.—In passing The Solvay Process Company's plant on the New York Central Railroad, the passengers are often surprised at the immense fields of white mud, covering about a square mile between the works and Onondaga Lake. Several thousand tons have been pumped in liquid form to the low, swampy land bordering the lake and after the water has evaporated, this region has been converted into a dry and solid spot suitable for manufacturing operations.

In the meantime a better use has been found for this material. Instead of pumping all of it away from the works some of it is made into lime.

Curious as it may seem, this white mud resulting from the use of lime in the process is exactly the same in composition as the original limestone, except that it is as fine as flour, while the large amount of water with which it is mixed has been the greatest obstacle in attempting to make lime from it.

This is now accomplished by first filtering it and then drying and partially calcining it in a rotary furnace, so that the moist mud goes in at one end and LAND LIME comes out at the other.

This is not quite all, as the hot lime must be cooled, ground and screened before being packed in bags ready for shipment. The finished material contains 30 to 40 per cent. of burned lime, i. e., lime made active by the process of burning, and the rest is carbonate of lime, quite as useful in improving the soil.

SOLVAY PROCESS LAND LIME

Write for prices

Raw Ground Lime

QUICKLY AVAILABLE

Necessity of Lime.—Lime is one of the earliest materials used in improving the productiveness of the soil. Lime is the only known agent that will restore land from an acid to an alkaline condition, thus keeping the soil friendly to bacterial life, which is necessary to a prolific soil. Land continually loses its supply of lime, and as lime in the soil decreases, crops decrease in proportion.

The farmers' throughout the country are awakening rapidly to the great mistake of cutting out the use of lime, and the return of its use is now becoming very general, and the question that confronts them is, what is the cheapest and best method of supplying the land with needed lime. We believe our Raw Ground Lime to be the very best product, everything considered, on the market; and with the question fully settled that it is better than burned lime, it should come into general use.

Our Raw Ground Lime is made from the purest limestone obtainable, as it is taken from the quarry, and by machinery, built especially for this purpose, is pulverized to just the **right fineness** to be available as fast as required, and just right to work nicely in a lime spreader or grain drill.

The leading agriculturists of this country are advising the use of Raw Ground Lime, and also say that it must not be ground too fine; if ground too fine it is too available, too easily soluble; and the loss by leaching far exceeds that by cropping.

Our Raw Ground Lime is not only more convenient to handle and use by the farmer than burned or lump lime, but being non-caustic it is safer to use. It is a well-known fact that burned lime destroys fertility while Raw Ground Lime sustains the fertility of the soil. If you treat a field with a coat of manure and apply burned lime during the same season, the burned lime will destroy and waste one-half of the manure.

Raw Ground Lime is shipped in bulk, or in 100-pound burlap or paper sacks.

CONLEY RAW GROUND LIME

Price per ton. Write for prices.

Grass-Growing For Profit

Making Two Blades of Grass Grow Where One Blade Grew Before with Nitrate of Soda

Abstract and Review of Rhode Island Experiments

Grass is a responsive crop and the part played by mineral chemical fertilizers, as has been proven in Rhode Island, shows the striking effect of Nitrate on yields and feeding quality.

Since all the other fertilizers were alike for the three plats and had been for many years, and since the general character of the soil and the treatments the plats had received were uniform, any differences must be ascribed to the influence of the varying quantities of Nitrate of Soda. These differences, so far as they are shown by the weights of the crops for four years, are given in brief below:

Yield of Cured Hay Under Different Rates of Nitrogenous Fertilization.

Nitrate of Soda Applied	1899 Lbs.	1900 Lbs.	1901 Lbs.	1902 Lbs.	Average Yields in Tons
None	5,075	4,000	3,290	2,950	1.9
150 lbs. per acre*	6,300	5,600	5,550	4,850	2.8
450 lbs. per acre*	6,913	8,200	9,390	8,200	4.1

*Amount slightly reduced in 1901 and 1902.

Grass Growing for Profit

A reliable, heavy top-dressing formula for Grass Lands per acre:
300 lbs. Nitrate of Soda.
200 lbs. Muriate of Potash, or 1000 lbs. of Wood Ashes.
400 lbs. Peruvian Guano or Acid Phosphate.
900 lbs.

Write Today for Prices on NITRATE OF SODA.

Ashes, Canada Hard Wood

Drives away insects and improves the texture of the soil; indispensable for all crops requiring potash; very beneficial for garden and field crops, grass lands and lawns. Contains 6 per cent. carbonate of potash. Apply 1 to 2 tons per acre, as one heavy application is better than the same quantity put on in fractions.

We are carload buyers. Ask for price.

Write for prices on the following:

Nitrate of Soda Muriate of Potash Acid Phosphate
Sulphate of Potash Kainit Rose Grower Bone Meal

Increase Your Crops With Farmogerm

Farmogerm Reaches the Farmer Ready for Use.—It needs no "development" or "treatment" before it is applied to the seed or otherwise used. We leave no delicate or difficult or bothersome work to be done by the user. The preparation necessary in the case of other cultures and the sending out of bacteria in a dormant condition have been the cause of many failures. **All you need do with Farmogerm is to mix it with a little water and moisten the seed,** and then when the seed are dry enough to handle, plant in the usual manner. The simple and easy way it is used is of great importance to the farmer both in avoiding chance of failure and because the labor and bother of using it amounts to almost nothing. Compare Farmogerm at \$2.00 per acre and almost no labor or cost in using it, with commercial nitrate fertilizers and the labor and expense of applying them to the land.

Farmogerm is Guaranteed.—We guarantee Farmogerm to be a pure culture of active, vigorous, nitrogen-gathering bacteria of the variety indicated by the label. We guarantee that the bacteria are high-bred, that is, bred up to a high degree of nitrogen-gathering ability. We guarantee that each bottle of Farmogerm contains these strong, active bacteria in sufficient quantity to inoculate the amount of seed or soil specified on the label.

What Farmogerm Will Do.—Farmogerm, as will be understood from what has already been said, furnishes legume crops with all the nitrates they need for a maximum growth, and causes enough nitrates to be produced during the growth of the legume crop and left in the soil to supply two or three following crops of other kinds. And the high-bred bacteria of Farmogerm produce these results to a much greater extent than bacteria which are not bred up to increase their nitrogen-fixing power.

Unless the soil is entirely unfavorable, Farmogerm will: 1. Increase legume crops, giving quicker growth, a larger crop and earlier maturity. 2. Increase the food value of legumes. 3. Make legumes grow in new localities where they cannot be grown without inoculation. 4. Supply nitrates to other crops growing with the inoculated legume crop. 5. Enrich the soil for future crops.

All this at the comparatively small expense of \$2.00 an acre and practically no extra work or trouble.

Farmogerm Is Easy To Use

Place the seeds to be treated in a pile on the floor or, if a small quantity, in a clean pail or bowl.

Open the bottle of FARMOGERM, and add the amount of sugar called for on the label.

Fill the bottle three-quarters full of cool water.

Replace stopper and shake thoroughly until the jelly is broken up in small pieces.

Pour the entire contents of the bottle on the seeds.

Mix thoroughly with the hands, shovel or rake until the seeds are all slightly moist. (Add more water if necessary.) Then sow.

Alfalfa grown in four days with Farmogerm in Rensselaer County

Mr. J. W. Davitt of Poestenkill, N. Y., on eight acres of land grew Alfalfa in four days this Fall. After cutting his Corn, he thoroughly harrowed this field for one week, then he inoculated his seed with Farmogerm and in four days he had Alfalfa up all over his field. We advise our customers to try a small field this Fall. Other farmers are successful. Why not you?

GORDINIER'S FREE CATALOGUES WRITE TO-DAY

No. 1—GARDEN SEED	- - -	100	Page Catalogue
No. 2—FARM IMPLEMENTS	- - -	90	" "
No. 3—POULTRY	- - -	40	" "
No. 4—SHEEP FERTILIZER	- - -	20	" "

Meadow Mixtures for One Acre

No. 1 On Good Land, Neither Too Dry nor Too Wet

- 5 lbs. Red Top
- 1 " Meadow Foxtail
- ½ " Perennial Sweet Vernal
- 2 " Tall Meadow Oat Grass
- 3 " Orchard Grass
- 2 " Hard Fescue
- 2 " Sheep's Fescue
- 5 " Perennial Rye Grass
- 17 " Timothy
- 2 " Red Clover
- ½ " Alsike Clover

40 lbs.

Sow 2 bushels to the acre

No. 2. On High and Dry Land

- 4 lbs. Red Top
- 4 " Tall Meadow Oat Grass
- 2 " Meadow Brome Grass
- ½ " Crested Dog's-tail
- 5 " Orchard Grass
- 2 " Hard Fescue
- 4 " Sheep's Fescue
- 1 " Meadow Soft Grass
- 15 " Timothy
- 1 " Rough-stalk Meadow
- 1 " Red Clover
- ½ " White Clover

40 lbs.

Sow 2 bushels to the acre

No. 3. On Wet, Late Land

- 6 lbs. Red Top
- 2½ " Creeping Bent Grass
- 6 " Orchard Grass
- 2 " Tall Meadow Oat Grass
- 3 " Meadow Fescue
- 1 " Tall Fescue
- 1 " Meadow Soft Grass
- 7 " Perennial Rye Grass
- 10 " Timothy
- 1 " Red Clover
- ½ " Alsike Clover

40 lbs.

Sow 2 bushels to the acre

Pasture Mixtures for One Acre

No. 4. On Good Land, Neither Too Dry nor Too Wet

- 3 lbs. Tall Meadow Oat Grass
- 4 " Red Top
- ½ " Perennial Sweet Vernal
- 5 " Orchard Grass
- 3 " Sheep's Fescue
- 2 " Hard Fescue
- 1 " Meadow Soft Grass
- 6 " Perennial Rye Grass
- 1 " Meadow Foxtail
- 4 " Kentucky Blue Grass
- 8 " Timothy
- ½ " Yellow Trefoil
- 1 " Red Clover
- 1 " White Clover

40 lbs.

Sow 2 bushels to the acre

No. 5. On Dry Land.

- 3 lbs. Creeping Bent Grass
- 4½ " Tall Meadow Oat Grass
- 1 " Meadow Brome Grass
- 4 " Orchard Grass
- 2 " Hard Fescue
- 6 " Sheep's Fescue
- ½ " Perennial Sweet Vernal
- 7 " Timothy
- 6 " Perennial Rye Grass
- 4 " Sainfoin
- 1 " Red Clover
- 1 " White Clover

40 lbs.

Sow 2 bushels to the acre

No. 6. On Wet Land.

- 6 lbs. Red Top
- 5 " Orchard Grass
- 2 " Meadow Fescue
- 1 " Tall Fescue
- 2 " Meadow Soft Grass
- 8 " Perennial Rye Grass
- 1 " Meadow Foxtail
- 8 " Timothy
- 1 " Rough-stalk Meadow Grass
- 4 " Kentucky Blue Grass
- 1 " Alsike Clover
- 1 " White Clover

40 lbs.

Sow 2 bushels to the acre

SEEDS

**At Wholesale Prices Direct to You
and Save the Middleman's Profit**

Buy direct and save the middleman's profit. Our seed is bought direct from the West in car load lots and is sold direct to you, saving you one profit.

GORDINIER'S BIG COUNTRY STORE

The Largest Mail Order House in
Northern New York

BUY DIRECT

SEEDS	GRAINS	BULBS
POULTRY SUPPLIES	FARM IMPLEMENTS	

Views of Gordinier's Big Country Store

Here is a picture of

Gordinier's Gilt-Edge Leaming Corn

13 FEET HIGH

WHAT DO YOU THINK OF THIS FOR CORN?

This is a view of Gordinier's Retail Department, one of the best arranged Seed and Implement stores in the State of New York—indeed, without delay or inconvenience to our customers we can fill from 1000 to 2000 orders a day. Here we carry more than a quarter of a million Flower and Vegetable Seed packages and several tons of Peas, Beans and Corn. Some of these Flower Seeds are very valuable, costing as much as nine to ten hundred dollars a pound, and even the Vegetable Seeds are costly, the Best Cauliflower, for instance, is worth about \$3 per ounce. Most of the seeds are imported from Europe, our contracts being placed two, three and four years in advance of the crops. This is to insure our

customers the very best Foreign Stocks. In this Retail Department we also look after our mail orders and parcel post shipments, and in our busy season hundreds of packages will be sent by mail to every State in the United States.

This is another view of Gordinier's Retail Department, showing a small part of the Largest Stock of Poultry Supplies in the State of New York. As the agent for The Cyphers Incubator Company we carry a most complete line of Incubators, Brooders and Supplies. This is especially true of Gordinier's "OAK BRAND" Scratching Feed, undoubtedly the best of its kind on the market. Indeed, in order to protect our trade we went to the expense of having our trade mark, "OAK BRAND" Scratching

Feed, patented in the United States. Therefore, if you want the very Best Scratching Feed be sure to ask for "OAK BRAND." From this department Gordinier mails all his Seed, Implement and Poultry Catalogues, and the postage alone amounts to several thousands of dollars, and more than nine tons of paper are used every year in making these books.

Seed, of which we sell several carloads every season. Before the Pure Seed Law was put in force we had made a standard for our Timothy much higher than that demanded by the government, and unless the Timothy could stand our standard it was not accepted or offered for sale. In quoting prices to granges we were very frequently higher than others, but when samples were sent to the government it was found that our prices were really lower owing to the fact that our GILT-EDGE Timothy was of a much higher grade. The granges soon learned of the high grade of the GILT-EDGE Timothy, and in order to protect our trade and assure them this high grade Timothy we went to the expense of having this trade mark "GILT-EDGE" patented in the United States. Protect yourself by asking for "GILT-EDGE" Field Seeds.

A view of Gordinier's Third Floor. A sort of an Implement Department in which we stock Harrows, Cultivators and Plows. It may seem strange to hear us speak of this as part of our Mail Order Department, but such is the case, for it is very easy for you to buy a Harrow, a Plow, or a Cultivator by mail. Simply send for our Big Implement Catalogue, make your selection and send us the order. That's all. Simple, isn't it?

Another view of Storehouse on Green Island. Look at these Wagons, any number of them and in all styles. Even wagons are sold by mail orders these days. Just send for Gordinier's Big Implement Catalogue.

Well, we hope these pictures have proved interesting and we hope you are convinced that this is really just what we advertise.

"BIG COUNTRY STORE"

H. W. GORDINIER & SONS CO., Troy, N. Y.