Historic, Archive Document

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

62.73

LIBRARY
RECEIVED

Department of Agriculture

HOFFMAN'S FARM SEEDS

1921

CLOVER-ALFALFA

SEED FOR HAY & PASTURE

CORN · OATS · GRAIN

POTATOES

FIELD PEAS

& BEANS

*Northwest brand
Alfalfa*

*Lancaster County
Sure Crop*

A. H. HOFFMAN, INC.

Landisville

Lancaster County, Pa.

Of Interest to Seed-Buyers

The supply in nearly all lines of Farm Seeds is larger than for years. Certain portions are of good quality, but some stocks are questionable. Prices generally are much lower. Demand will doubtless be heavy. These statements sum up the situation for 1921.

RED CLOVER—ALFALFA—TIMOTHY. These seeds are in heavy supply. America's 1920 crops of them were good, and heavy stocks were carried over from former seasons. Large quantities of Alfalfa and Red Clover were imported from Europe in Spring of 1920 much of it is still unused. Dealers owning it have lost heavily because of declining markets, and are tired holding it. They will try to sell—certainly at attractive prices. Be very cautious when offered Alfalfa Seed and Red Clover at very low prices. New crop American seed is much preferred, and you can buy it reasonably this year. This book offers no foreign seed—but strictly native seed of sound quality. Supply of **ALSIKE CLOVER** is not as heavy as that of Red Clover, but the crop will take care of requirements.

SEED OATS—CORN—GRAINS. All of these seeds are offered from bumper crops. Quality very good. Prices are upon levels that will pay any farmer to renew the strains he has been using, or substitute better ones where his kinds have 'run out.'

SOY BEAN—COW PEA—CANADA PEA crops are above normal—and good qualities of them can be had at fair prices. This is the year to learn of these crops by trying them. Complete instructions in this Catalog.

SEED POTATOES promise to sell at reasonably firm values even though crop was normal or above. Maine-grown seed, such as we handle, always commands a premium over that produced elsewhere, and we believe is worth its cost.

ORDER EARLY. We can see no advantage in waiting. Prices will likely remain firm. Best seed can be procured early. It is worth something to have your seeds and be ready to use them when the time comes.

You are going to be pleased with any purchases you make from this list. Good, dependable strains, and reliable qualities of them, are offered. Let us handle your order this year.

A. H. HOFFMAN, Inc.

OUR "MONEY BACK" PLAN

Return of Seed Allowed and your Money Refunded if You Want It.

That is, if the quality of seed or anything we sell is not satisfactory, you can ship it back—we'll refund your money and pay all freight charges. Time will be allowed when you wish to have purity and germination tests made. We will not be responsible in any way for seed or resultant crop after it is planted. Too many conditions we cannot control are involved after seed is sown.

BAGS ARE FREE and not weighed in with the Seed. Most firms make you figure 'extra' for bags. We don't. Keep this in mind when comparing our prices. Bags are very expensive. **WE PAY THE FREIGHT** per Offers printed below. By these Bag and Freight Offers you know exactly what your seed will cost you sacked and delivered.

Freight Paid Offer No. 1

We will prepay all freight on orders amounting to 300 pounds to be shipped at one time to any freight station in Pennsylvania, N. J., N. Y., Maryland, West Va., Del., Ohio, Virginia, Conn., R. I., and Mass.

Freight Paid Offer No. 2

If you are not in our Freight Paid Territory, and order 300 pounds or more, we allow 35c per 100 pounds to help pay freight charges. Deduct this allowance from your remittance when ordering.

Shipments by Express are sent "Charges Collect." If you order 300 lbs. or over sent by Express—we will refund you the freight charges that would have been paid by us per above Freight Paid Offers.

(When seed is to be forwarded by Parcel Post, add for Postage as per Schedule on back of enclosed Order sheet.)

Prices Change. Quotations are not printed in this Catalog—values are constantly changing. A separate Price List is mailed with Catalog. If you should delay placing your order, ask us for new Price List when you are ready. Price Lists will cheerfully be mailed as often as you ask for them.

Payment Must Accompany Orders. Remit by Money Order, Draft, Check, or Cash by Registered Mail. Don't ask us for credit—we can't do business that way. Our customers' standing remains unknown to us even though they may order year after year. References: "Dun's" or "Bradstreet" Merchandise Agencies; The Guaranty Trust Co., Lancaster, Pa.; The First National Bank, Landisville, Pa. Any Farm Paper carrying our advertisements.

A. H. HOFFMAN, Inc., Landisville, Lancaster County, Penna.

Clover Seed

The clover plant is a necessity on any farm where rotation of crops is practiced. It leaves in the soil a deposit of nitrogen whose value cannot be denied. A plowed-under clover sod is insurance for the success of crops that follow. Besides the plant's value to the soil, the hay made from the Clovers is very nourishing—richer in protein than that made from other grasses, and in this respect cannot be replaced by any of them.

This is the Year

To seed down heavily. Many fields have been slighted in recent years because of extreme prices for seed and fertilizer. As this page is being written, market prices are on a level way below those of past few years. Whether or not they will remain so, we can't prophesy for we don't know. Yet the supply of seed available is such as to warrant fairly low values—and whatever trend the markets take later on, wise farmers will be those who make use of their opportunity to apply clover seed liberally this year.

Best Seed the Cheapest Every Time

Don't be induced to buy your seed from a person who talks chiefly on lowest price. There are reasons for everything—reasons for low-priced Clover Seed, too. Not more than one-fourth of this year's supply of seed in the country will be made into real first-grade seed, yet nearly every dealer will tell you he handles the "best" seed. The truly best seed cannot sell as low in price as the off-grades. Especially this year, it will pay every farmer to put his money into good, reliable, tested seed, such as this catalog offers him. A saving of a dollar or two per bushel now on "cheaper" seed may prove by far the most expensive in the end. Buy Hoffman's Clovers and be assured of clean fields—better hay and more of it!

"Clover Seed"—Continued next page

"YOU MUST BE PLEASED"—

With every purchase of Clover Seed or other Seed you make from this Catalog. Your own judgment governs the case. If you're not satisfied with the quality of the Seed you receive, return it. Make use of the "Money-Back Plan" printed on opposite page. Our business is to please you.

Good clean seed plays an important part in every bumper crop.

Clover Seed

Three Reliable Brands

“Extra” brand is the best known and most widely used. It is our standard brand. Into Hoffman’s Extra brand Clover Seed goes nothing but the very highest grade of seed that the crop affords. This means, seed that is the pick of the crop—seed that is right as to color, cleanliness and germination. Only seed cleaned clean of noxious weed seeds—free from other impurities—and seed that will, under test, show strong and vigorous growth. Wherever Hoffman’s Grass Seeds are known, the trade name **“Extra”** is familiar. This seed is selected for us by careful buyers in the leading producing sections of the country. Cleaned over the most modern equipment of seed-cleaning machinery. The quality of the work that our cleaning mills turn out is well known to thousands of the country’s most careful farmers who have used **“Extra”** brand seed with entirely satisfactory results for many years.

“Extra” rivals the very best brands of our competitors. It is cleaner and purer and more dependable than the contract prime seed traded on in the Toledo Seed Exchange. Hoffman’s **“Extra”** brand of Clover Seed will please you.

“Northwest” brand of either Clover, Alfalfa or Timothy seed, means seed produced in the farthest northern sections of the country. Sections where the parent plants have had to endure extremes of weather conditions. Seed that possesses an unusual degree of hardiness. **“Northwest”** brands of seeds sold by us are not necessarily cleaner, sounder, or of higher germination than our **“Extra”** brand of Clover or Alfalfa, or **“Farmers’ Choice”** brand of Timothy Seed, which have now become so popular throughout the East. **“Northwest”** brand seed is the highest grade gathered from that far Northwest section of our country—from the States along the Canadian line—from the Great Lakes west to the Pacific—including the famous Black Hills and North Rocky Mountain districts. This is beautiful, plump, large-berry seed, bearing characteristics of earliness, hardiness and productiveness that have made it profitable for our Eastern use.

“Safe” brand Clover Seed is what its name implies—**“safe to sow.”** Safe because of its freedom from fowl seeds—safe because of its strong germination. **“Safe”** brand clover is not equal to our **“Extra”** or **“Northwest”** brands, but matches the quality of the many so-called first grades offered you. It is superior to the seed sold by the average country dealers. Many cheaper grades of Clover Seed could be offered, but we regard **“Safe”** as the cheapest grade of dependable quality that anyone should sow.

VARIETIES OF CLOVER

Medium Red Clover. This is the best known grass seed. Along with Timothy, it forms a combination from which nine-tenths of our hay is produced. It is invariably sown in the late Winter or early Spring on land that was sowed to grain and Timothy during previous Fall. By this method Clovers are started without any special preparation of the land. The culture given for the benefit of the grain having prepared the ground to receive the Clover Seed.

The ideal time to seed Clover Seed, either Medium, Mammoth, or Alsike, is during late Winter or Early Spring, upon a day when the soil is honeycombed by frost. Seeded under these conditions, the first slight thaw will enclose nearly every seed and enable it to start its life of service. When the grain crop is harvested the Clover will be well established and at once make rapid growth. Sow 3 to 6 quarts Medium Red Clover per acre when it is sown where Timothy also has been seeded. If Clover alone is desired, sow 6 to 8 quarts per acre.

Failure of Clover on any farm means loss of opportunity to gather nitrogen from the air at little cost and to cheaply produce great tonnage of hay, rich in protein, which is the flesh and blood building element of feeds. Quality of seed is very important to successful establishment of Clover. Our business is to furnish the seed. We offer three brands of Medium Red Clover. The cheapest of these is "Safe to Sow." The other two, "Extra" and "Northwest," will please you no matter how critical you are as to either price or quality. See Price List.

Alsike Clover is much like Medium Red in manner of growth. The blossom is nearly white and the seed is very small with its color light to dark green. Alsike is not quite as tall as Red Clover, but makes a finer hay. Alsike is mostly used in combination with Red Clover. The usual proportion when mixing the seeds is two parts Red Clover to one part Alsike, or three parts Red Clover to one part Alsike. This will make the growth about half and half of each. A bushel of Red Clover and Alsike mixed as here recommended will reach as far as 1¼ bushels straight Red Clover. Alsike catches better than common Red—it is therefore some insurance against failure to sow Alsike along with Red Clover, for the Alsike will succeed when Red Clover, on account of unfavorable conditions, may fail—the surviving Alsike will be sufficient to make a satisfactory crop. Two brands—"Extra" and "Northwest"—are offered. Description opposite page.

Mammoth Clover, also known as "Sapling" and "Pea Vine," is very much like the common red variety. The blossom and shape of leaves is the same and it is used for much the same purpose. Mammoth Clover is a little coarser in the stem, grows a little taller, ripens a little later, and its roots penetrate a little deeper into the soil. It produces but one crop of hay and produces less pasture after seed is produced than common Red Clover. It will thrive on poorer soil than Red Clover and withstand drouth and freezing quite well. Should be sown about the same as Red Clover. See Price List.

Inoculate Your Clover Seed with "Farmogerm"

Unless your soil is full of the proper bacteria for Clovers, it will pay you to "Farmogerm" Clover Seed of all kinds. Its use is to increase the quantity of Nitrogen the plant takes from the air while growing, and thus deposit larger quantities of it at its roots. This process will benefit the growing crop as well as those that will follow on this same soil. Farmogerm easily pays for itself, and more besides, and is recommended for use on your Clover Seed this spring. See page 32.

What Farmogerm Does for Clover

Sweet Clover. The most popular variety of this valuable Legume plant is the Biennial White Blossom (*Melilotus Alba*). This plant lives two years, then dies. Planted either Spring or Fall of one year it will live until Fall of the following year, when the plant will die. If left go to seed, Sweet Clover will reseed itself and last on the same ground for years.

The value of Sweet Clover is for hay, pasture, soil improvement, and to inoculate soils for future Alfalfa crops.

SWEET CLOVER—Continued on page 4

If You Grow Your Own Clover Seed

you are fortunate, provided you are fixed with a Cleaner that will make it fit to sow. If you don't have a suitable cleaner, BUY A "CLIPPER" SEED CLEANER, and make better seed out of your Clover, Timothy, Wheat, Corn, Oats or any other seed crops your farm produces. The "Clipper" cleans cleaner than other mills—and sells at a very reasonable price. See last page.

Economical Mixture

Made of Red Clover, Alsike and Timothy

This combination is a very proper one to sow for either hay, pasture, or soiling purposes, and is sold so cheaply that it will appeal to all who wish to save something on their grass seed bills. The proportion is approximately **one-fourth Timothy, one-fourth Alsike, one-half Red Clover**. This mixture can be sold cheaper than the separate grasses because it is made in part from lots of Clover and Timothy (mixed) and lots of Alsike and Timothy (mixed), that were produced and harvested in this mixed condition. The market for such seed being narrow it can be bought for less than if the seeds were separate. Because of differences in size and weight these seeds cannot be cleaned quite so perfectly as unmixed seed, but otherwise the mixture is made up of seed like that in our regular best grades and easily passes the seed law requirements of any State. See Price List.

SWEET CLOVER—Continued from Page 3.

Sweet Clover sown in the Spring will make a fine growth of hay in the Fall of the same year. The growth may be from two to four feet tall. The next Spring, growth is rapid and may be used for either hay or pasture. Two crops of hay may be made and then another crop will follow in the late Fall. This last crop will go to seed. This cutting will also make hay, but it will be of a coarse nature and not nearly as palatable as the crops that are made earlier in the season before the Clover blooms. Sweet Clover seeded during the late summer will not make a crop of hay the first season, but it will furnish fine pasture and in the following season will yield either hay or pasture in abundance, the Clover growing five to eight feet tall.

Cattle soon become accustomed to Sweet Clover pasture and prefer it to almost any other grass. It is a splendid practice to sow Sweet Clover in corn fields at last cultivation. If good seed is used and put into the soil under favorable conditions a fine growth of Sweet Clover will result, furnishing pasture for late Fall, a Winter covering, and pasture again in the early Spring.

Sweet Clover will do well in almost any kind of soil. About twenty pounds per acre should be seeded either in the Spring or in the Fall. The seed should be covered. If the soil has not grown Sweet Clover heretofore the seed should be inoculated. The best form of inoculation is "Farmogerm." There is nothing better to bring a worn-out field into farmable condition at little labor and expense than Biennial White Blossom Melilotus. It is worthy of any good farmer's attention for this purpose. Prices, See Price List.

Inoculate this
Seed with
FARMOGERM.

White Clover. Known also as "Dutch" Clover. Has a low creeping growth. Constantly renews itself—its stems coming in contact with the earth and thus forming new plants. Very valuable for permanent pasture, lawns. Its blossoms furnish abundant nectar for bees. See Price List.

Crimson Clover is used largely for a cover crop and for plowing under for soil improvement. It should find more general use for these purposes. It will make good hay, but it ripens in May when good haying weather is not usually at hand. Crimson Clover is not a perennial—it will last only one year. It should not be seeded until July 1st, when it may be sown where early potatoes have been harvested, or in corn fields at last cultivation. It will often furnish pasture over Winter and during early Spring. For a cover crop Crimson Clover will make an abundant growth, ready to turn under May 10th to 25th—in time to turn under for most any Spring crop. By sowing Crimson in corn or after an early Spring crop, you can add an immense amount of humus and nitrogen to your soil without missing a money crop.

Crimson must be sown, however, with some care. When you sow in a corn field you should first sow the seed, then cultivate so as to cover it. If you follow potatoes or grain crops, disc the land and harrow in the Crimson Seed. In an open field, rolling is advisable after seed is sown. Sow about one bushel to four acres. You will get a better stand and gather more nitrogen if you inoculate your seed with Farmogerm, fully described, page 32. See Price List.

Inoculate this
Seed with
FARMOGERM.

The "Cahoon" Seed Sower is accepted everywhere as the world's standard sower. It is the most accurate and the most durable. It is made of steel, iron and brass and will last as long as any farmer and still be as serviceable as when new. Full directions go with every machine. Adjustments are easily made, and it is a pleasure to operate. We send them to our customers packed up in corrugated fibre boxes by parcel post, postage prepaid, for \$5.50 each.

The "Cahoon" Seed Sower

Alfalfa Seed

Alfalfa Seed—This year presents an excellent opportunity to start Alfalfa at lower cost than for several seasons. We say to those who have made unsuccessful attempts in the past—this is the year to try again. . . . Success with Alfalfa depends upon careful starting [read paragraph on Good Seed below], hence we urge careful following of the suggestions made on these pages regarding proper seed, preparation, etc. If these details are followed closely, results will be highly pleasing.

The three big points in favor of growing Alfalfa are: (1) the tonnage of valuable hay it produces each year; (2) the number of years the crop will stand without reseeded; (3) the ever-increasing value it puts into the soil which is producing it. While crop after crop of hay is being taken off, the soil planted to Alfalfa is constantly gaining in richness. Alfalfa doesn't ask the farmer for nitrogen—it is a legume, gathers its own nitrogen from the air, and deposits great quantities of it in the soil at the roots of each plant. Nitrogen, as you know, is one of the most important elements in the soil. The Alfalfa plant's long roots reach way down into the subsoil many feet, and bring up phosphorous and potash, and store it near the top-soil for the use of succeeding crops.

Good Seed of Greatest Importance

There is an ample supply of good seed in the country—but there is also an abundance of inferior seed, perhaps more than ever. Immense quantities were carried over from last year—most of it being imported seed. Its quality is not desirable. Certainly the firms holding it will try to sell it, and must offer it on a low price basis. Don't be induced to buy this grade of seed—even though it costs a few dollars less per bushel. You'll find it the most expensive in the end. . . . Buy the very best seed you can procure—be sure it is northern grown American seed. Certainly it costs more, but divide its extra cost among the several years it will outlast the other strains, and you will find it the best investment.

You can place absolute dependence on receiving good, clean, American seed, of vigorous germination, when making your selection from the varieties offered on next page.

FACTS ABOUT ALFALFA

"There is no State in the Union in which Alfalfa cannot be successfully grown."

Alfalfa produces from 3 to 7 tons hay to the acre. It has as much protein as Wheat bran.

360 stalks have been grown from one seed.

It does not exhaust the soil, it enriches the soil.

It will grow 3 to 5 crops a year.

Alfalfa in money value is worth 45 per cent. more than other Clovers and 60 per cent. more than Timothy.

One acre will pasture 20 pigs for 6 months.

Three pounds a day makes a full feed for fattening lambs.

Four to five pounds makes full feed for fattening aged sheep.

Thirty-five pounds makes full feed for fattening steers.

Sheep fed on Alfalfa will gain from 8 to 15 pounds in 75 days and will double with small grain ration added.

Lambs wintered on Alfalfa will produce one to two pounds more of wool than when on the ranch.

Fed to dairy cows Alfalfa maintains the flow of milk equal to June Grass. It can be chopped fine with corn meal. Such a mixture is worth more a pound than the original corn meal.

"Its long branching roots penetrate far down, push and crowd the earth this way and that, and thus constitute a gigantic subsoiler. These become an immense magazine of fertility. As soon as cut, they begin to decay and liberate the vast reservoir of fertilizing matter below the plow, to be drawn upon by other crops for years to come."

THE ALFALFA PLANT. Observe the many nodules on the roots. These contain the nitrogen the plant collects from the air while growing. Inoculating the seed with "Farmogerm" increases this supply of nitrogen. See page 32.

Hoffman's "Northwest" Alfalfa

The very choicest strain of Alfalfa Seed possible to secure. This brand is recommended unconditionally to our customers. It is the cleanest, brightest and strongest seed from non-irrigated fields in the far Northwest. This includes the districts adjacent to the North Rockies and Black Hills, the Most Northern sections where Alfalfa Seed can be matured. Very little of the seed ever reaches the Eastern markets. "Northwest" Alfalfa possesses vigor and hardiness unequaled by seed grown elsewhere. Only a strong, vigorous strain can endure the climatic conditions of the Northland. Feeble plants can't live there. Therefore, the seed matured is only from strong plants of the most hardy types.

Most of the quality of seed from this section fit for our Northwest brand is eagerly purchased for reseeding right in the states where it is produced. Our stocks were procured with the greatest difficulty, and at prices that forbid the possibility of selling as low as the common Alfalfas in the market. However, the price is within reach. We firmly believe that one-fourth less of our "Northwest" Alfalfa seed is needed per acre than of the common brands; so that the use of this hardy strain of Alfalfa from the Black Hills and North Rockies is really a matter of economy.

At this writing we are fortunate owners of fair sized stocks of this strain—but we urge our customers to order this brand long in advance of seed time. Most of our trade demands "Northwest" Seed, and we don't want to disappoint anyone by being sold out of this strain of seed when his order is received. See Price List.

Hoffman's "Extra" Alfalfa

Hoffman's "Extra" Alfalfa is not second grade by any means. It represents the very highest possible degree of purity, as well as germination. Beautiful as to color. It is Northern grown, American, unirrigated seed. Not grown as far North as our "Northwest" brand, but in a latitude that makes it suitable for culture all over the Middle Atlantic States. Hoffman's "Extra" is a grade that very rarely finds its way into Eastern Seed Stores. We have sold Hoffman's "Extra" Alfalfa for years here in the district served by us and it has given complete satisfaction. It will compare favorably with any competing brand in the market, both in purity and growth. In vigor and hardiness it is second only to our "Northwest." See our Price List.

"Grimm" Alfalfa

It is claimed for Grimm Alfalfa that it has larger crowns and a more spreading root system than other strains of Alfalfa, and that Grimm Alfalfa will start better in undrained, wet locations. The reputation of Grimm Alfalfa was made before the splendid hardy and prolific strains were developed in the Black Hills and North Rockies, and at present these new Alfalfas produced in the Northland are close competitors with the Grimm strain. Grimm Seed is held at almost prohibitive prices. Our "Northwest" ranks so high and costs so much less that we are not sure it pays to sow Grimm.

Our "Grimm" Seed was grown in the Black Hill region. If you order "Grimm," tell us if we may substitute "Northwest" if we are sold out of "Grimm." See Latest Price List.

Instructions for Growing Alfalfa

1. PLANT IN A DEEP, LOOSE, WELL-DRAINED SOIL. Where soils are rather thin the condition can be remedied by deep plowing. Alfalfa has a deep-feeding root system which can not be utilized without favorable top soil conditions. When this is furnished the roots will soon reach down through rather stiff clay soils. Soils that are sandy or lacking in fertility should be corrected by heavy applications of manure. If the land is sour it must be sweetened by liming. See paragraph 5.

2. THE SEED BED MUST BE WELL PREPARED. The soil should be thoroughly pulverized to considerable depth and then made quite firm by rolling or dragging. The land must have a chance to settle. It usually takes as much as six weeks for land to settle, though in periods of frequent heavy rains the settling process may require only four weeks. The disc and harrow are the tools needed to follow the plow in soil preparation. After the ground is thoroughly prepared it should be harrowed after each rain. If it does not rain the land should be harrowed every ten days until the seed is sown; this will insure sufficient moisture for germination and destroy the weed seeds in the soil. Unless the land is thoroughly freed of weeds ahead of seeding there is danger of same making headway and choking out the Alfalfa plants while they are young and tender. When you plan Alfalfa seeding long in advance you should grow cultivated crops ahead of the Alfalfa, and make every effort to destroy every possible weed plant before it rescues itself.

3. IF SOIL LACKS HUMUS it is well to supply it by turning under clover sod or cow peas or soy beans or crimson clover or sweet clover. This will make the soil friable and with the manure you apply will give the Alfalfa the fertility of soil to sustain it in its early growth. Alfalfa when established is a strong grower and will look out for its own feed if there is anything in reach. But when the plant first starts it is indeed weak and must have plenty of available food in order to make a good growth the first year. Then it will build a strong tap root which will enable it to winter well and start vigorously to produce growth of hay the following Spring.

4. INOCULATION IS NECESSARY. This means that you must plant in the soil nitrogen-fixing germs or bacteria, without which Alfalfa cannot flourish. Where sweet clover grows vigorously by your roadside it is possible your land has naturally the proper bacteria to grow Alfalfa, as these two bacterias seem to be the same, and where one grows the other will thrive. Your soil may be full of clover bacteria or cow pea or soy bean bacteria, but these germs will not help your Alfalfa. So that it will be necessary to supply these Alfalfa germs or bacteria artificially. We believe the very best bacteria to buy is that sold under the name of "Farmogerm." We keep it in stock at all times and furnish it to our customers. See about "Farmogerm" on page 32 of this catalog. The manufacturers of "Farmogerm" were the original discoverers and introducers of commercial bacteria and their product is the most dependable that can be secured. Their laboratory processes are most elaborate and scientific. We absolutely know after putting out thousands of dollars' worth of "Farmogerm" that this form of cultures is all that is claimed for it. There are other methods of inoculating Alfalfa, but we cannot recommend them.

5. USE OF LIME FOR SOIL ACIDITY. Alfalfa must have soil that is sweet and not acid. Where crops of grain have been grown successively for many years soils are apt to become acid. You can test your soil yourself, as follows: Buy a dime's worth of blue litmus paper at your drug store. Take a knife and cut into the ground you want to test, pressing the earth slightly apart. Then push a piece of the blue litmus paper into the opening and press the earth firmly together so that the blue litmus paper will be held firmly and leave it there for several hours. The soil must not be too dry. If the paper turns from blue to red it is evident that your soil is acid and needs lime to correct it. To insure correct results the test should be repeated in several parts of the field. Burned lime should not be used in greater quantities than two tons per acre. If ground limestone is used an application of 3,000 pounds per acre is recommended. Where agricultural lime is procurable it is safer to use than either of the above forms, as it is not caustic. Two tons of lime or more, not caustic, per acre may be used. All lime must be applied after plowing and same must be worked in thoroughly, preferably by disking and, if possible, a few weeks before seeding.

6. BEST TIME TO SEED. This is different in different localities and depends upon climatic conditions and upon whether you can give proper attention to soil preparation, weed killing, etc., in advance of any set time for seeding. You can sow either Spring or Fall, here in the Middle Atlantic and Ohio Valley States. A very good rule is to seed **as long ahead of the most trying season** for the young plants as possible. Any time in late April, May or June in the Spring, or late July, August or early September in the Fall is permissible, provided the other conditions in these paragraphs have been taken care of. Where very hot mid-summers must be feared, early Fall seeding should be considered. Where very severe winters are anticipated Spring seeding may be preferred. We have observed that among the successful Alfalfa growers of Pennsylvania and adjoining States Spring and Fall seeding are practiced in about equal proportion and with about equal success.

7. SHALL THE SEED BE COVERED? By all means cover the seed. Seeding on top as clovers and timothy are occasionally seeded will be risking failure. On heavy loam soils cover the seed from three-fourths to one inch. On sandy soils that dry out readily cover one and one-half to two inches. Alfalfa seeds have a hard coat and will not germinate unless the seed is firmly packed in damp soil. When seed is broadcasted a shallow set smoothing harrow or a weeder must be used. We believe in rolling after working in the seed. Alfalfa disc drills do splendid work as the seed can all be placed in the exact depth that is required.

8. HOW HEAVY TO SEED. In the East more seed is needed than in the West. We advise using plenty of seed. Ten to twelve pounds would be sufficient here in the East if all other conditions

—Continued next page.

—Instructions for Growing Alfalfa, continued.

were exactly as they should be. Unless you have eliminated all danger from weeds and are absolutely sure of sufficient dampness to encourage perfect germination and can place every seed at the right depth you will be much safer if you sow twenty pounds per acre. We know many successful Alfalfa men who put in thirty pounds per acre. This is a matter of judgment which must be considered together with every other condition under which the Alfalfa bed is started.

9. ABOUT NURSE CROPS. Nurse crops, where there are some weeds to contend with, help to check them in Spring seeded Alfalfa. A nurse crop may be harvested and the income derived will help toward the expense of starting the Alfalfa. This way the use of the land the first year is not entirely surrendered to the Alfalfa. The nurse crop should be sown lightly. Heavy seeding will rob the Alfalfa of moisture and fertility. Don't use oats. Oats drinks too much water and shades thickly. Spring barley, beardless preferred, at rate of $\frac{3}{4}$ bu. per acre, is the most suitable grain to use for nurse crop. Don't plant nurse crops with Alfalfa in the Fall. When nurse crops are used in the Spring sow the grain and Alfalfa separately.

A Very Satisfactory Stand of Timothy from "Farmers' Choice" Seed

Timothy Seed

"Farmers Choice" Brand. This is the highest grade of Timothy Seed obtainable. Its germination is almost perfect—and it is cleaned *clean*—its purity being from 99.60% to 99.85%. The very, very small portion of impurities does not consist of dangerous weeds, but of harmless fibre and other grass seeds, principally Alsike and Clover seeds. There is no cleaner, sounder Timothy Seed on the market than Farmers Choice, and it is sold to you under the same Money-Back Plan that governs all other purchases you make of us. Farmers Choice brand Timothy Seed will positively please you, no matter how particular you are as to cleanliness and growing qualities. You are allowed all the time necessary for the making of tests you might wish made on Hoffman's Timothy Seed. See Price List.

"Northwest" Brand Timothy Seed is not necessarily cleaner or higher in germination than Farmers Choice brand. It is the best seed that comes from the States of the far Northwest. This seed has extraordinary style as to color, and will please those very discriminating farmers who want seed of extraordinary grade, even at a strong premium in price. . . . It has been established beyond doubt that Alfalfa Seed coming from this far Northern district possesses an unusual degree of hardiness over the seed produced further south. This can also be said of Timothy and other grass seeds that are produced in the trying seasons of this rigid climate. See Price List.

Good Seed is Essential to success in farming Timothy. Poor seed, besides being full of weeds, will not grow. Seed of poor germination may come up weakly and live, but produces few stalks of uncertain growth. The difference in cost of inferior Timothy and the better grades is so little that it is poor economy to buy the cheaper stuff always offered. Sown alone, 6 to 8 quarts Timothy seed per acre is required. When Clover is to be added in the Spring, only 4 to 6 quarts Timothy need be seeded.

Always keep in mind our "Bag Free" and "Freight Paid" Offers. They mean much when you compare our prices.

Sow Hoffman's Lawn Grass Seed

Hoffman's Lawn Grass can be seeded with absolute assurance that you are seeding the best. It is composed of strictly clean, fine leaved grasses of highest quality. The most expensive grasses are included, and the mixture, if carefully seeded on well-prepared soil, will produce a most beautiful sward—even—fine in texture—rich green in color. Lawns may be seeded at any time from Spring to Fall. Weather, however, is apt to be most favorable to seeding very early in the Spring or early in the Fall. One pound of seed will reach for two hundred square feet if soil is thoroughly pulverized and in mellow condition. When soil conditions are not strictly ideal, heavier seeding is advised. We advise that seed be raked in lightly so that it will be covered from one-fourth to one-half inch. After seeding, the soil should be pressed down firmly. Prices—See Price List.

Mixture for Permanent Hay and Pasture

The right grasses—from 12 to 16 in number—in the right proportions are used to make up this mixture. The highest authorities have been consulted and our practical experience followed. Varieties are used that will make a succession of grasses to be cut or pastured the first season. If the seed is sown carefully, under reasonably good conditions, pasturing may begin early in the Summer and last until late Fall. A large proportion of the grasses used are of a permanent nature and a field once firmly established will last for many years. These mixtures are recommended for either Spring or Fall sowing, 30 to 35 lbs. per acre. Two mixtures are made—one for well-drained upland sowing, which is called Highland Mixture—the other for lowland meadows, which is called Lowland Mixture.

There are farms in every community that have land—now left idle because of difficulty in farming—too rocky, too steep, too small or too wet, to be farmed in the regular rotation; that if sown to one of our mixtures could be made to produce hay or pasture in profitable quantity for many years. Now that hay has become so high in value it is wasteful not to put these areas of land to work producing either hay or pasture. Price — See Price List.

Hay Grown From Our Permanent Hay and Pasture Mixture

MISCELLANEOUS GRASS SEEDS

Red Top. This is a valuable grass for either hay or pasture. May be sown either Spring or Fall. Grows slowly in the Spring and ripens with timothy. It is a strong grass. Does not die out. When once well started will spread and supplant other grasses. It, however, is not hard to destroy when it is necessary to plow land for other crops. It succeeds well in any soil and is particularly well adapted for low moist lands. Red Top Seed is sold both solid and in the chaff. Sow 10 to 12 lbs. per acre of solid seed or 20 to 30 lbs. in the chaff. The heavy seed sells as 32 lbs. per bushel. The light seed as 14 lbs. per bushel.

For several years Solid Red Top Seed has been scarce and high. Now bright, heavy seed is available at prices not more than half as high as a few years ago. Under these circumstances we recommend seeding heavy seed rather than resorting to the lighter unhusked. We have farmers who prefer Red Top to Timothy as a producer of either hay or pasture. It is a very valuable grass both for seeding alone or to seed along with Timothy, Clover or other grasses. With low-priced good seed available—this is the year to give it trial. See Price List.

Kentucky Blue Grass. This fine-bladed, rich green, nourishing grass may be sown in the Spring or Fall. It grows most rapidly in cool weather, but withstands the effects of the greatest heat. Kentucky Blue Grass does not grow as rapidly as some other grasses, but when once started makes the finest pasture. It is one of the best grasses for lawn mixtures and for other hay and pasture mixtures. On limestone soils the finest lawns can be started with Kentucky Blue Grass alone, however.

—Instruct—

For our Lawn Grass Mixture for lawn purposes and for hay or pasture purposes we advocate that other quicker growing grasses be sown with it. We have beautiful, heavy Kentucky Blue Grass to fill our orders this Spring and the price is low, which should induce its more liberal use. See Price List.

Orchard Grass. This is one of the best grasses. It is valuable both for hay and pasture. It is very succulent and nourishing and is more leafy and of greater length than most other grasses. Orchard Grass grows quickly, and bears close cutting and close pasturing. It begins its growth early in the Spring and continues right up till late Fall. It will last for years without the necessity of re-sowing. May be sown either in the Spring or Fall on any kind of soil that is not actually covered with water. Two bushels are required to sow an acre. Prices—See Price List.

Canada Blue Grass. Very much like the Kentucky except that it is coarser, grows a little more rapidly—good for hay and pasture, but not so desirable for lawns. Price—See Price List.

Meadow Fescue. Another perennial of much value. Sometimes called English Blue Grass, but it is not at all like our Kentucky or Canada Blue Grass. Meadow Fescue grows two feet tall—thrives anywhere in the North. Yields abundantly of either hay or pasture. Suitable for mixtures. Is relished by stock. Does well on wet soils. Keeps growing well into Winter. Sow either Spring or Fall, fifty pounds per acre if sown alone. See Price List.

English Rye Grass. Also sold under the more general name of Perennial Rye Grass. Is an extremely valuable grass that makes a rapid growth. Adapted to all soils. May be sown either Spring or Fall. Is a good one for mixtures. Does well with Orchard Grass. When sown alone 30 to 40 lbs. per acre is required. Prices—See Price List.

Bromus Inermis. This grass came originally from Russia. It is now grown largely in the West, where it has become one of the most popular grasses. It is a perennial grass that will stand for years on the same ground without renewing. It wants a rich soil for best result. May be sown from early Spring to late Fall. It withstands heat, drought and frost. It is alike valuable for pasture and hay. Both hay and pasture is greatly relished by cattle and all kinds of stock. It roots so deeply that it is enabled to thrive on the driest soils. It is a good one to sow with other grasses. Bromus Inermis is entitled by its many merits to more general use in the East. Sow two to three bushels per acre. It weighs 14 lbs. per bushel. Prices—See Price List.

Tall Meadow Oats Grass. Here is a tall rank grass that may be grown on soils that are inferior. It grows quickly and makes a good hay or pasture. It is hardy and will last for years without resowing. It is so deeply rooted that it will withstand drought of any length. This grass becomes green very early in the Spring and remains green late in the Fall. This grass should be more generally known, for it is certainly a valuable variety and worthy of the attention of the best farmers. It weighs from 11 to 14 lbs. per bushel. Sow from 2 to 3 bushels per acre. This is a valuable grass in mixtures. It is especially adapted to be sown with Orchard Grass, Red Top Clover and similar grasses. It is more expensive than the rye grasses, but really one of the most valuable on our list. Prices—See Price List.

Hoffman's Seed Oats

Although official reports show the United States oats crop of 1920 to be among the largest on record, considerable difficulty was experienced in our purchasing Seed Oats stocks that were of desirable quality. Many sections suffered greatly because of damaging rains about harvest time—this condition resulted in much of the Oats offered for seed use being indeed unfit—badly stained and of unsound growth. The supply offered readers of this Catalog is of very good quality—all tested for germination—of bright color—heavy weight—thoroughly cleaned—free from fowl seeds—strictly sound seed.

There has always been a heavy demand for a "side" oats. That is, a kind that grows its grains on one side of the main stalk—similar in growth to a horse's mane. Demand was always greater than the supply. This year we are prepared to handle more of this business than usual—and we urge folks who like to grow a "side" oats to read pages 12 and 13, and to engage early their supply of the "Improved White Russian" side oats there offered. It is a variety that has proven very valuable for culture throughout the East. . . . The "Shadeland Climax" offered on opposite page is one of exceptional quality and merit—procured with greatest difficulty from points near the Pacific Coast. . . . Every kind of Seed Oats offered is a sort of more than ordinary value—capable of producing good crops of clean grain for their purchasers.

Prices are upon such basis this year that you are afforded an excellent opportunity to establish new strains upon your places, as well as to renew certain strains you have already found suitable for your use. Early orders are urged to avoid disappointment. See Price List.

"Shadeland Climax" Seed Oats

"Shadeland Climax" Oats was developed in the famous Shadeland Valley of the State of Oregon. This valley is not flat, nor is it irrigated. The land is gently rolling to hilly. An ideal section for the production of Seed Oats that are always white, heavy, strong in germination and vitality. Indeed, Oats grow to perfection in this locality, and when taken to other sections carries with it the power to produce extra heavy yields.

"Shadeland Climax" is a sprangle or tree oats, large in the berry, often showing three grains to a spikelet. The hull is thin and the hulled berry is one of the largest and finest you ever saw. Ripens early—very early—ahead of the other oats produced where it is grown. Has a stiff straw that stands up under its burden of grain under the most trying circumstances. No oat is absolutely rust-proof, but "Shadeland Climax" from this favored section has rust-resistant qualities that make it safe from ordinary attacks when other varieties yield to rust's ravages.

Most important is the fact that "Shadeland Climax" is one of the heaviest-yielding tree oats. On tracts of hundreds of acres it has given yields of 93 bushels per acre. On smaller tracts, more than 100 bushels per acre has been harvested. Every year we have sold this seed throughout the section we serve, "Shadeland Climax" has been making new friends for us, because of its ability to yield heavily.

Because of the good records it has been making, "Shadeland Climax" is greatly sought after by seedsmen from other sections. Result is that in order to get some of the seed for our trade we have had to pay an enormous premium. Freight charges per car amount to nearly \$1,000—you see, they must travel clear across the United States. Price therefore that we must receive for it seems high—but indeed is low compared to common oats considering their value. In the best tests possible—alongside of other oats—it has come out first. First in yield—first in earliness—first in weight of grain, and withal, as beautiful white grains as is possible to grow.

Order your "Shadeland Climax" seed quickly. Supply is limited this year. Last year several of our friends were disappointed by waiting until late to order, as we were sold out. See Price List.

Prize Winning Sheaf of
"Shadeland Climax"

Grains of "Shadeland Climax" Seed Oats (Actual Size)

A Wonderful Crop of "Improved White Russian"
(This field made slightly over 100 bu. per acre)

A Genuine "Side" Oats "Improved White Russian" Variety

Nothing in the Farm Seed line is so much sought after as a real "Side," or as some say, a "horse-mane" type of Seed Oats. This kind of Oats has many friends—probably more than any other distinct type of Oats. We have to admit that heretofore we have never been able to nearly supply the demand there is for them. This spring, however, we are prepared to furnish many folks with their "Side" oats seed. But even with this larger-than-usual supply, we urge early orders.

Produced on a Seed-Farm with Greatest Care

No other sort of oats is grown there—only the "Improved White Russian" Side Oats. Hand-picked seed started the first crop. Since then very unusual precautions have been taken. Threshing rigs didn't handle any other kind of Oats since. The Seed Farm mentioned above is in North Dakota—40,000 acres, devoted to specializing on pure seed stock. Results of their work are being closely watched by outsiders. There is close

Inspection Each Year by Agricultural Authorities

Inspectors from the North Dakota Agricultural College examine the fields each year. A written report to us, signed by the manager, dated August 4th, 1920, contained the following: "We have inspected a number of our oat fields, and find that the *percentage of other than 'side' oats*, including wild oats, is *not more than one-half of one per cent.*" This would mean to us as pure and genuine a "side" oats as it was possible to secure anywhere.

A Heavy-Yielding Variety

Since we first offered this variety in 1916, very pleasing reports have been coming to us from customers who bought it. Almost without exception, users of "Improved White Russian" speak in highest terms of the satisfactory yields they have gotten from it. This after all is the practical test of any grain's value—and we believe White Russian is *entitled to first place among "side" or "horse-mane" varieties* as to yielding ability. Crops of 100 bushels per acre from large tracts of land have been harvested. Many have passed the 85-bushel mark.

Bright Heavy Grains—Very Thin Hull—Full Feeding Value

The grains of "Improved White Russian" are very plump—not extremely large grains—but very plump. The hulled kernel is as large as the largest grained oats. But the hull containing the kernel is so thin that the unhulled kernel shows but a very little larger than the hulled kernel. You get fullest possible feeding value from a variety of such thin hull. Grain is heavy—an actual test showing it to *weigh 45 pounds to the measured bushel*. This 1920 crop was harvested and threshed in absolutely sound condition without damaging rains, and our stocks are strictly beautiful, white, unstained and fancy seed oats.

Stiff in the Straw

On the level prairie lands of North Dakota where our stocks were grown, the growing crops are subjected to severe storms which are very damaging at times. The ability of the "Improved White Russian" Oats to stand up under such severe tests is very marked. Its straw is stiffer than that of any other oats grown in this far-off section with which we have become acquainted. Resists attacks of rust—having suffered but very little damage when other sorts alongside of it in tests have been seriously damaged. "Improved White Russian" is classed as an early variety. Doesn't rank among the very earliest kinds, but ripens in mid-season throughout Pennsylvania, Ohio, New York and adjoining States.

"Improved White Russian" a Good Investment

Seed Oats brought from the cold Northwest to be planted further South brings from that section qualities of hardiness and productiveness that are almost an insurance against failure. Even if "Improved White Russian" were only a common variety of oats it would pay to plant it in the East and South. But all of our stock of it came from these certified fields of North Dakota, and a better, sounder, truer lot of side oats we are very sure was never offered. It is a variety that has proven a good investment for our customers. Considering the extra premium it cost us, along with the very high freight charge from this far-off section, our stock of "Improved White Russian" seed is offered at a very low price for seed of such quality. See Price List. Buy "Improved White Russian" and we know you will be pleased with results.

Improved
Russian
White
Side Oats

Harvesting "Improved White Russian" in North Dakota

(Tractor pulling five binders)

“Swedish Select” Seed Oats

This valuable variety was brought to this country from Russia, by the Department of Agriculture, in 1899. It at once became popular because of its heavy yields and other desirable characteristics. It is early, has a stiff straw that prevents lodging, and is a branching variety. A few years after its introduction to this country, Mr. G. A. Garton took it to England, and there under his care and breeding so improved it that when it was again sown in this country it showed even greater yields than when first brought from Russia.

The Bureau of Plant Industry at Washington, in an official bulletin, said of this variety: “It has been shown that the ten-year average yield of this Oats at the Wisconsin Experiment Station was eight and one-half bushels per acre greater than other varieties.” Our customers who have purchased this variety from us in the past have had good results—favorable reports have come from all sections.

One characteristic of the Swedish Select is its great root development. This gives it power to go through with big yields on almost any kind of soils or under varied conditions. Customers having high, dry situations or clay-loam soils on which other varieties have not succeeded will do well by sowing this popular variety.

Swedish Select is grown with success in almost every section where oats is grown on a commercial scale. Farmers who want a branching variety of a well tried, reliable kind can safely put their trust in Swedish Select, regardless of the acreage they want to put out. We advise sowing 3 bu. per acre.

Order in multiples of $\frac{1}{2}$ bu.—such as 5, $5\frac{1}{2}$, 6, $6\frac{1}{2}$, 7 bu., etc. See Price List.

“Silver Mine” Seed Oats

The Silver Mine variety has earned for itself an enviable reputation. Is one of the old standard sorts. It is a very hardy as well as prolific type—yields kernels of good bright color and thin hull. Is a variety in great favor among manufacturers of rolled oats, they being partial to it because of its thinness of hull.

The heads are of the tree or sprangle type, growing long and starting low down on the stalk. This tendency seems to prevent lodging easily. The straw is thicker and stronger than that of the average oats, hence better adapted for growth on heavy soils than many of the ordinary varieties.

“Silver Mine” is an early variety. This, together with other favorable tendencies, makes “Silver Mine” a fine variety to plant mixed with Canada Peas for early crops of feed for either hay or soiling. Farmers who feed oats in the sheaf, straw included, claim that the soft hulls, large grains and clean straw of the “Silver Mine” make it palatable.

See Price List. Order only in multiples of $\frac{1}{2}$ bu.—like 5, $5\frac{1}{2}$, 6, $6\frac{1}{2}$, 7 bu., etc. Not less than 2 bu. sold.

“Peerless” Seed Oats

Here is an oats at a very low price for those who want something good at a figure only a little above the cost of feed oats. It is the fifth appearance of this Peerless variety in our catalog. Very pleasing reports have come to us from customers who have used this seed during past seasons.

“Peerless” is a regular tree or branching oats—is not the very earliest maturing variety, but is classed as an early sort. Ripens in mid-season. Our stocks are of good heavy seed—bright color—well cleaned and sound—free from weeds—strong in germination. It will please. The stock offered came to us from northern Illinois. See Price List for quotations. When consulting same, please consider that both the cost of bags, and the value of our Freight Paid offers are figured in the price. These are important items, don't overlook them. . . . If you want a good variety for a small outlay of cash, and a kind that will produce a satisfactory yield, order this “Peerless” oats. Orders must be in whole numbers of bushels, such as 5, 6, 7, 8, etc.

“Bumper Crop” Oats

“Bumper Crop” continues to be a favorite variety of oats. We like “Bumper Crop” for the many friends and customers it has made for us. Our customers like it for the money it has made for them. Many who purchased this type from us in past seasons have sold off good parts of their crops as seed to their neighbors. A field of Bumper Crop oats is surely an attractive sight—long, compact heads, beautiful clusters—and when harvested will thresh out satisfactory crops of very large berry oats.

The formation of the heads of Bumper Crop is such that the variety cannot be classed as a side oats or a branching type. There are no branches, the seeds being formed along the main stem—but, unlike the side oats, the grain surrounds the stem (note picture).

The “Bumper Crop” variety was bred from a single head of oats selected by Mr. E. C. Detmer, of Ohio, from a field that was lodged flat. This single head stood up alone, like a sentinel. It had thick-walled straw. The head was of great size, with grains all around it twice the size of common oats. This head contained the parent stock of our present “Bumper Crop” oats. The variety is one of great productiveness—it has retained all its stiffness of straw. It is early. Has decided smut and rust-resistant qualities. Is an exceptional stouter, unexcelled for its rugged hardness.

For the most part, the grains are of a beautiful white color. A portion of this year's seed supply is not quite as white as is common to the variety, but is guaranteed sound and high in germination. It will please the most exacting purchaser.

This variety was given the right name—it is surely capable of bumper crops. The yielding abilities have been proven time and again. One instance showed a yield of $84\frac{1}{2}$ bushels per acre, alongside of other sorts that made only 50 bushels. Advise early purchases of “Bumper Crop” seed. See Price List. Order only in multiples of $\frac{1}{2}$ bu.—5, $5\frac{1}{2}$, 6, $6\frac{1}{2}$, 7, etc. Not less than 2 bu. sold.

“Bumper Crop” Oats

Seed Potatoes—

Our supplies of Seed Potatoes come exclusively from Aroostook County, Maine. No other section of the country is quite as well adapted to the production of high-grade seed potatoes. Last season conditions were more favorable than usual in Aroostook County for a good, sound, clean crop. Yields of 350 bushels and over per acre were not unusual on the best potato farms. The benefit to come from the introduction of Maine seed is now generally recognized by up-to-date potato growers everywhere. We have many customers who each year discard their own seed in favor of Maine seed. It pays them to do so.

Our offerings come from productive crops grown on ideal soil in this far north climate—and from growers who take precautions to keep their crops rid of blight and disease, and to ship us good, true-to-name stock.

VARIETIES OF SEED POTATOES

We handle only the standard sorts which hardly need description. See Price List. We would warn our friends to be careful of the many new varieties offered at extraordinary prices. In most cases these are simply re-named potatoes of the old sorts—some of them without merit.

Irish Cobbler. The best-selling variety. Fully one-half of our sales are of this sort. The Irish Cobbler is the earliest standard white potato. So well known that description might be omitted. It is round to oblong in shape. Eyes are rather shallow for an early sort. There is an indent at stem end of potato. The cluster of eyes at seed end is apt to be on the side of the end. These characteristics of the Cobbler will enable anyone to identify it. The Cobbler is one of the best yielders. Given rich soil and proper fertilizer it will make extraordinary crops. The foliage is strong—branching—dark green. The eating qualities of the Cobbler cannot be excelled. It is quite mealy—not only when dug early, but when kept through the following winter.

The Cobbler stores safely. Though it is an early sort, its eyes remain dormant as long as the later varieties under same conditions. The keeping qualities of the Cobbler have made this variety a suitable one for commercial planting. Summing up—the Cobbler is very early—cooks well—is mealy—beautiful in shape and color—stores safely—yields enormously. See Price List.

Green Mountains. This is probably the best known standard sort grown. It is of highest eating qualities—round to oblong—white flesh—healthy grower—heavy foliage—good keeper, retaining its good eating qualities all through the winter. We have to offer this year fine stocks of an improved strain of this variety. Order your supply of them early. Sales are always heavy on this sort.

State of Maine. Another standard sort, well and favorably known—oblong in shape—large in size—prolific yielder—too well known to require lengthy description.

Grown in Maine

Sir Walter Raleigh and Carman No. 3. These are two favorable sorts, very similar in manner of growth. Both blossom purple—grow round to oblong in shape—fine in eating qualities—heavy yielders—ripen in mid-season.

Early Rose. One of the oldest sorts that holds its popularity for earliness, yield, and eating qualities. The pink coloring in flesh shows plainly in our stocks.

Early Ohio. It is distinct in type, quite unlike any other sort—slightly pink in color—very early ripener—heavy producer. It is widely and favorably known as an early garden sort of much merit.

Except for a small quantity, these potatoes will be stored in Maine over Winter, and will be brought down in heated cars the last half of March and distributed from Landisville. Usually, we can ship seed potatoes after March 20th, but if weather is too cold, shipments will be withheld.

Prices of Seed Potatoes fluctuate wildly, so that it is impossible to print them into our catalog. We will follow the trend of the markets and quote closely. All potato quotations are for immediate acceptance. If you delay ordering, write for new prices.

Order Seed Potatoes Now to insure getting exactly what you want. We will hold same for you until weather permits shipment with safety from frost. Orders booked now require an advance payment of \$1 per sack—this is simply as evidence of good faith in the transaction. Balance of cost to be paid when you want shipment started in the spring. Orders for less quantities require full payment in advance. See Price List.

FACTS ON SUCCESSFUL POTATO PRODUCTION

Sandy soils, gravelly soils, medium to light loamy soils, heavy soils if drained, are suitable for potato growing.

Deep plowing, at least 8 inches (10 inches is better) is essential for best results.

Thorough harrowing to mellow the soil, to warm it, to preserve the moisture, cutting in 7 inches deep with disk is advised.

Good Seed from the extreme North (preferably from Maine) is recommended.

Soaking the Seed 2 hours in 1 lb. formalin, diluted in 30 gallons of water, will prevent scab. Seed must be dried after treatment and before cutting or planting.

Large seed pieces preferred. One or two eyes. Each piece must have a good portion of flesh to sustain it until roots are started.

Commercial fertilizer preferred to manure. As much as a ton per acre permitted if same is worked into the soil and not allowed to contact with seed pieces.

Plant deep. 3 inches where early digging is the object. 4 to 5 inches if big crop is desired.

Plant 12 to 15 inches in row. Rows 3 feet apart. Machine planting is best and economical.

After planting, cultivate—cultivate—cultivate. Begin before potatoes are up, continue weekly if possible till vines are dead. Spray with Pyrox to kill pests and to prevent blight and other fungous diseases.

Cutting "Red Cob White Ensilage"

Seed Corn

No other section is better adapted for the production of Seed Corn than is Lancaster County. On account of the fertile soil here, and the favorable climate, corn grows to perfection and immense yields are secured. Among our growers, greatest precautions are taken to grow pure seed of desirable types. Back of all our varieties are records of heavy production, patient selection and breeding that make for heavy yields.

Seed ears are selected at husking time, and placed at once in special drying racks in our warehouse. By this means, no two ears touch until ready for shelling—perfect air circulation is about each ear. Besides natural air drying, heat is applied in damp or extreme cold weather. After thoroughly dried, the tip and butt grains of each ear are removed—before shelling. Corn is thoroughly cleaned and fanned after shelling. Quality of this stock is second to none—its cost is very moderate—indeed, but a very few cents per acre higher than corn of your own production costs you. It pays to plant seed of this quality—produced under such favorable soil and climate conditions—and for the small investment required you would be greatly pleased by selecting your Seed Corn from these pages. We urge—engage your requirements early.

"Red Cob White Ensilage." This is a white variety, a regular silage corn. In our estimation, it is the best special ensilage corn, as well as the best fodder corn. It is very tall and leafy throughout its length, and yields an extremely large tonnage of ensilage. The grain is white—the cob red. This variety may be depended upon anywhere. In the North and where seasons are short, the ears will not fully mature. Where the season is of average length, "Red Cob White" will mature considerable grain. This variety has been sold as a special ensilage corn for many years, and uniformly good reports are received by its users. Our seed stocks of this variety are of first class quality—well matured, dried and protected over the winter. See Price List.

ADD SOY BEANS TO YOUR SILAGE. Here we take space to urge our friends who have Silos to grow Soy Beans for Silage as well as Corn. One part Soy Bean growth to four parts Corn will make of your Silage a perfect ration. The Soy Bean plant will supply the protein that the Corn lacks. You can grow the Soy Beans right in the same row as the Silage Corn. Or plant the Soys separately. Read pages 23 to 25 for comments on Soy Beans as source of Protein.

"Lancaster County Sure Crop"

(For Husking as well as for Ensilage)

This is an unusual variety—odd in type—but truly a sure cropper. The first few years it was offered for cribbing uses, but some folks were so well pleased with its ability to produce fine silage that it has since become very popular for both purposes.

As a Silage Variety

Lancaster County Sure Crop holds first place in the estimation of many leading farmers. Of late many have come to believe that considerable corn, as well as stalk, should go into the silo—and that where length of season permits, the corn grains should be well glazed before cutting. Farmers with this viewpoint are firm believers in Lancaster County Sure Crop as the very best corn for this purpose. Because of this, our trade in this Sure Crop variety for ensilage purposes has grown to immense proportions.

Many large dairymen throughout Pennsylvania, New York, New Jersey and Ohio, and the States that adjoin them, now depend each year upon this variety—Lancaster County grown seed—for their silos. Farm Bureau agents throughout Pennsylvania have become acquainted through tests with the merits of this variety—with its nutritive value as compared to other silage corns, and recommend it highly. This variety *grows quite tall—is very leafy—develops ears early—*withstands drought—will develop corn well to the North. The coming spring will witness a greatly increased demand for this superior variety—and we especially urge your very early orders being placed. You will be pleased with Lancaster County Sure Crop as a silo-filling variety—rich in its protein content. See Price List.

As a Cribbing Variety

For husking purposes, "Lancaster County Sure Crop" is just as valuable a variety as it is for ensilage. As the best corn for a variety of soils, we do not think this Lancaster County Sure Crop can be excelled.

It differs in type from every other corn on our list. It would take no prizes at a corn show—it doesn't conform to the standards that corn judges like to see—doesn't have the fancy, straight row manner of growth. The ears are very long, not proportionately thick. It is of golden yellow appearance on the ear. When shelled, it has a sort of reddish yellow or speckled appearance. (Corns that shell red are good yielders for rough and ready farming.)

You will usually find 14 to 20 rows of grain. Rows tend to grow curved rather than straight—note pictures this page and on outside front cover. Ears of Lancaster County Sure Crop fill out especially well—from butt to tip. Grains are very hard. They are not deep, but more square. Rows set closely—*"Lanc. Co. Sure Crop"* continued next page.

Lancaster County Sure Crop

Besides the two varieties described above, two other kinds—"Johnson County White" and "Long's Champion"—described on following pages (varieties widely used for husking purposes), are in constant use as ensilage corns on many successful farms throughout Pennsylvania and neighboring States.

Lancaster County Sure Crop—Continued

together—with very little waste space between them. There is not much cob, so that the proportion of shelled corn to ear is very satisfactory.

An especially good habit of this variety is to produce a good ear on every stalk in the field. Nubbins are very few. We strongly recommend Lancaster County Sure Crop for use where other varieties of corn have not shown up well—on soil of just average fertility—or even on poor ground—or where proper culture could not be given. This variety will give a very good account of itself under such conditions.

Rich in Protein. No other variety will excel Lancaster County Sure Crop in this respect. This has been proven by established chemical tests, and by practical experiments. **Husks Easily.** This is very worthy of mention. Those who do the actual work will appreciate this easy husking feature.

“Reid’s Yellow Dent” leads our list of straight yellow cribbing corns. Not one year have we had enough of this variety to supply the demand for it. No better evidence could be given of its popularity. Reid’s Yellow Dent is a first-rate, all-around, practical variety of yellow corn. Ears are medium in length—cob is red and **very thin**. Grains are deep. Rows run very regular from end to end—and are set very closely on cob—there

couldn’t be a more compact ear. Reid’s Yellow Dent fills out well at both tip and butt. Few corns show such a big proportion of shelled grain to cob. Reid’s YD is an early corn. Not quite early enough for the Northern exposed slopes of Pennsylvania

Mountain sections, but will mature nicely anywhere else in Pennsylvania, Delaware, Ohio, New Jersey, Virginia and West Virginia. It is suitable alike for land that is only moderately fertile, as well as for rich soils.

Reid’s Yellow Dent will produce a good solid ear and every stalk can

be depended on for this result. This is an important test of any variety. No corn will yield heavily per acre unless each stalk can be depended upon to yield a creditable ear. Reid’s is strictly a yellow corn—both shelled and on the ear. The fodder is medium to tall—it is leafy. This is desirable in case of prolonged drought. Reid’s has been grown on the Hoffman Homestead Farm for many years with very good success. If your land is of the average kind—neither extremely rich nor extremely poor—and your season of average length, you need not hesitate to plant Reid’s Yellow Dent.

“GOLDEN YELLOW DENT”

This is a very rich-colored yellow corn. The ears are a trifle thicker and a trifle shorter than Reid’s Yellow Dent. The grains are deep, somewhat pointed. The red cob is small. Golden Yellow Dent shells well. Seventy-two pounds of ears frequently yield sixty-four pounds of grain. A good reliable yielder. Yields heavily and reliably. Fodder is medium to tall, and leafy. Our Golden Yellow Dent is grown on a farm adjoining our own by a very careful farmer. See Price List.

Golden Yellow Dent

Shall We Substitute? In ordering Seed Corn always advise your second choice if you have any. Early orders of Seed Corn insure getting your first choice.

SEED CORN ON THE EAR. Early in the season we can accept orders for some varieties on the ear. As soon as our corns are thoroughly dried out we start tipping, butting, shelling, grading, cleaning, after which only Shelled Seed Corn can be procured. This season we can’t furnish Red Cob Ensilage or Early Learning on the ear, only shelled. Only full even bushel lots corn on the ear 70 lbs. each will be sold. Don’t order fractional bushel of corn on the ear.

“White Cap Yellow Dent”

Here is a strain of White Cap Yellow Dent Corn that has met with unusual favor. It is the best looking, and the best yielding, of any of the White Cap Corns we have known. The variety differs from every other on our list. Ears appear white—that is the exposed parts of the grains when on the cob, show white. But when shelled, the sides of the grain show yellow—indeed, a richer, more healthy looking yellow than we have ever noticed on a white cap strain.

The originator and producer of our supply of this strain is a local man, Mr. D. M. Landis. He is a young, successful Lancaster County farmer, who has applied to corn breeding, selection and production, much patient labor and deep study with very gratifying results.

A Prize-Winning Strain

With this corn, Mr. Landis has captured many first prizes at various Corn Shows over the country—Local Shows as well as National Shows. In the last few years' exhibits at Harrisburg, Mr. Landis has been taking first prizes in his class. Besides its ability for winning prizes, this White Cap Yellow Dent is a

Heavy Yields of Solid Ears

The percentage of shelled corn to ear corn is very pleasing. Rows of grain are very closely set on the cob. Ears thus form very compactly. Cob is not large. Ears therefore of moderate thickness—20 to 24 rows of grain. Grains are of good length as well as width.

Doesn't Require Richest Soils

This point is greatly in favor of this variety. It will respond, of course, with heavy crops planted on the richest soils; but does much better than the ordinary on soils of just average fertility. This quality is bringing White Cap Yellow Dent into favor rapidly.

Matures Early

Throughout New Jersey, Pennsylvania, Ohio, southern New York, and all States South excepting in mountainous sections and highest altitudes, White Cap Yellow Dent will mature nicely. Makes good size ears. Each stalk produces a good ear—which has much to do with the productive value of any variety.

“White Cap” corns are being more widely used each year because of their heavy yielding qualities and their ability to do well on soils of just medium richness. This strain we offer is a very true type—early enough and productive enough for the most critical farmer—indeed, ranks among the most valuable types we have ever offered. Anyone who has met with disappointment in other strains of White Cap tried out, will find satisfaction and profit in this particular strain. Early orders are urged—demand will be heavy and may absorb the supply quickly. See Price List.

White Cap Yellow Dent in Shock

“Early Leaming.” The earliest variety on our list—will mature in 90 days. This is the genuine, small-eared, early variety. Of course, not the most attractive variety on our list, because of the short season in which it develops. The grains are of good size, cobs small, borne low down on the stalk. Color is a rich yellow—not surpassed by any other sort on our list in this respect. This variety will do well even north of Pennsylvania, and if planted in time will succeed in high altitudes. Where season will afford it, we would prefer the other kinds offered.

“Improved Leaming” is a larger-eared sort than the corn just described above—requires a slightly longer season, but unless you have need for a corn extremely early, will give you a more satisfactory crop of corn. A very popular variety where seasons are of just average length. See Price List.

Long's Champion Yellow Dent

has a richer yellow color than formerly—matures a bit earlier—a smoother ear has been bred. None of the productive ability of the variety has been lost. Long's Champion can be made to yield 100 bushels shelled corn per acre in good hands. Ears have good thickness—good length—often weigh two pounds. The rich yellow grains have depth and width—a good ear is truly a mass of corn. See Price List.

HOFFMAN'S SEED CORN

Tested and sound in germination—insures full, even, stands and best crop results.

“Long's Champion Yellow Dent.”

This variety will recommend itself to those in search of large-eared, yellow, deep grained varieties. It is, indeed, a magnificent corn that will please and profit the grower. In considering such varieties, customers will please note that large-eared yellow corns require richer land, more careful culture, and a longer season than the smaller eared sorts. This is just the variety for the ambitious farmer who wants to do something big and unusual in corn growing. He can't depend on our seed alone—but if he will fertilize his land, prepare it well, see that there is a full, even stand, and cultivate after he has the stand, he will grow a crop that will please him—profit him—astonish his friends.

Long's Champion a favorite ensilage variety—growing in favor each year. Produces immense tonnage per acre—preferred by many to the regular silage varieties.

Long's Champion has been improved in our growers' hands during past few years. It

Ears of “Long's Champion”

“Johnson County White” Corn. This is a pure white variety—the only strictly white corn we offer. Growers of this variety win more prizes than those of any other corn. “Johnson County White” has taken the Grand Champion Prize in four successive National Corn Shows. The ears are almost perfect in their formation. This is not an early corn—requires the full season. Don’t plant it in northern Pennsylvania, Northern Jersey, or sections of similar latitude. It will mature in southern counties of Pennsylvania as well as southern Ohio and Indiana and States to the South.

DOES NOT REQUIRE RICH SOIL.

May be planted in soils of just average fertility.

Will produce larger crops than will large-eared yellow corns under such conditions. Some folks think that white corns are not as nourishing as yellow corns—there is no difference in this respect—the greatest variation being less than 1%. “Johnson County White” will prove a profitable cropper where climate will permit, and it doesn’t require the best kind of soil to do it. See Price List.

Spring and Summer Grains

Spring Wheat (“Marquis” Variety). This is the variety of Spring Wheat that is being grown most extensively in all spring wheat sections. Government authorities recommend it as a very reliable sort, both for its yielding abilities, and its good flour-making qualities. We have been discouraging the growing of Spring Wheat, except in the higher portions of Pennsylvania and in the States to the North. We believe this Marquis variety will do further South. We can now say this after having had reports from users—and knowing that this variety has succeeded where other kinds of Spring Wheat have failed. Marquis spring wheat has done well for years among the winter wheat sections of Iowa and Kansas. One reason that Marquis does better than other Spring varieties is that it is earlier by ten days than the others and not nearly as subject to rust and disease. Marquis makes a beautiful grain—somewhat smaller than our ordinary winter wheats—and is productive. Our Marquis seed comes from northern Minnesota, which means that our seed, besides being pure and clean, has all the inherited tendencies of the Northwest—earliness—hardiness and productiveness. See Price List.

Bearded Spring Barley. Barley will do well most anywhere, from the Canadian border to the States far South. In the Eastern and more Southern States it will deteriorate unless seed is brought from the North. Barley will do well on land too poor for other grain crops. Two bushels is the amount usually seeded per acre. It will yield again as much as wheat and the grain is valuable for all kinds of stock. Barley should be sown as early as Oats if possible, for best results, but barley will stand late planting much better than oats. This year we have again secured North Dakota grown barley for our trade. It is of the Manschury variety. This sort produced in this far Northern section has been doing well for the trade in the past. It is a bearded sort that leads other varieties in feeding value and yielding qualities. It is early, does not lodge. Try a few acres of Manschury Barley this year. See Price List.

Beardless Spring Barley, as a grain crop, is not as valuable as the Bearded Barley—it does not yield as heavily. It is chiefly used as a nurse crop for Alfalfa, when the latter is started in the spring months. Sow about three-fourths of a bushel of Beardless Barley with each acre of Alfalfa, when this nurse crop is desired. By harvest time, the barley will then yield about a half crop of grain. For a full crop of Barley, sowing it alone, use two to two and one-half bushels of seed per acre. See Price List.

Spring Rye. This valuable rye is used to produce grain and is also used to sow with other grains for Spring pastures and soiling purposes, as well as for nurse crops. Spring Rye should be seeded early, same as oats, and will make fine crops. Seed should be brought from the North every few years, as seed produced here deteriorates from time to time. Spring Rye is not quite as plump in the grain as the Winter sort, but is just as valuable for all purposes. Our stock was secured directly from the grower in North Dakota, and is pure, clean, and true to name. See Price List.

Speltz or Emmer. The production of this grain in the United States is greatly increased each year. Speltz is adapted to a wide range of soil and climate. It resists almost any extreme of weather. It is excellent feed and makes heavy yields of grain. Will in time rank with the standard cereal crops of the world. Those who have not yet grown Speltz should try it upon at least a few acres of their farm.

Speltz is readily eaten by all kinds of stock—is especially adapted for feed to cows. Speltz should be mixed, however, with bran or shorts to give best results. Speltz is also valuable as a hog feed and may, too, be fed mixed with other feed to horses.

Speltz is a wonderful drought resister and proof against all conditions that undo other cereals.

Sow 2 bushels Speltz per acre—and handle the crop all through about the same as you handle Oats. Fine stocks of new crop Speltz ready for your orders. See Price List.

FACTS ABOUT SPELTZ

It resists drought. Ripens very early.
It thrives on poor land, stony ground, in forests.
It makes a crop with almost any condition of soil or climate.
Endures a great deal of frost.
Is not readily damaged by harvest rains.
Does not yield to rust or smut.
Yields as well as Oats, Rye, Wheat or Barley.
Makes better feed than Barley.
Stock readily eat both grain and straw.

Speltz or Emmer

Japanese Buckwheat

Japanese Buckwheat. May be sown where other crops have failed or where hardly anything else will grow. Japanese is the standard and most popular variety of Buckwheat—is a sure “catch” crop. Besides producing heavy crops on poor soils, it must be remembered that Buckwheat is not hard on land. May be seeded all of June and first half of July. Only one bushel of seed per acre is needed. Yield in grain and straw is heavy, even on thin soils. Buckwheat flour is very valuable human food. Buckwheat midlings have high protein content and are in much demand for dairy feed. Buckwheat in the grain is an attractive poultry feed. See Price List.

Silver Hull Buckwheat. Enjoys with the Japanese variety a world-wide reputation. The grain is of a beautiful gray and has a thin husk. Millers like Silver Hull, as it makes a white flour and leaves little waste. A favorite variety for bees. See Price List.

Canada Field Peas (Grown in Michigan)

Each spring more large dairymen and stock feeders are using Canada Peas for purposes of hay, soiling and pasture. Yet the great advantage of the plant for early feed production is known to only a small portion of those who should each Spring plant Canada Peas, either alone or mixed with Oats. This is a cool weather plant, and one of the earliest that may be put out with safety in the Spring. Just as soon as the frost is out of the ground and it can be worked into shape, you can plant your Canada Peas. (The reader is cautioned not to confuse this "Canada Field Pea" Crop with "Cow Peas" described on page 29. Sow Canada Field Peas early—sow Cow Peas late.)

Most Folks Plant Canada Peas with Oats

This is the most popular method among dairymen. They plant as early as possible. Within a very short time after planting the ground is covered with green. The quantity per acre most commonly planted is $1\frac{1}{4}$ bu. of Canada Peas, along with about the same quantity of Oats (an early variety of oats preferred). Peas and oats may be mixed and sown together. However, careful dairymen sow each separately and claim surer results for their trouble. The Canada Peas should be drilled first—3 to $3\frac{1}{2}$ inches deep. Then the Oats should be drilled $1\frac{1}{2}$ to 2 inches deep. The deeper planting of the Canada Peas will protect the latter in case very dry Spring weather is met with. If the Canada Peas are planted alone, $2\frac{1}{2}$ bu. per acre are required, if drilled; 3 bushels per acre if broadcasted and harrowed in.

For a time the growth of the Canada Peas planted alone will be upright, then the plant will fall over and complete its growth in a recumbent position. Because of this habit, it is preferred to plant with oats. The oats will support the vines, thus making the crop more palatable, easier to get to, and less troublesome to harvest.

Canada Field Peas will make an abundant pasture for hogs, sheep and cattle. However, it is wasteful to feed in this way, as trampling by stock destroys much of the growth. The most economical way is to let the growth become tall, when the mixture of oats and Peas should be mowed and either fed green or made into hay. The cuttings should take place when the Oats is comparatively green, and the Peas have begun to form pods. This makes the very finest hay, or if fed green the very best fodder that can be offered to any kind of live stock. After this cutting a new growth will be made that may either be turned under with the plow or be pastured.

The supply of real high grade American grown Canada Peas seed is limited this year. American grown seed is much preferred to that of foreign production—in spite of the slight premium one must pay for the former. Our stocks come direct to us from the producer in northern Michigan and are of splendid quality.

The Right Variety of Oats should be sown with Canada Peas. We recommend strongly "Silver Mine" and "Peerless" Oats quoted on our Price List. Both these sorts are early—not too thick-walled, and yet plenty strong enough to support the pea vines.

Canada Peas a Legume—Improving Soil That Grows Them

Besides its feeding value this soil-improving feature of the Canada Pea Crop must not be overlooked. Nitrogen is gathered from the air in sufficient quantity for the plant's own growth and the surplus is deposited in the soil. This benefits the crop that will follow—is good fertilizer gotten in a very inexpensive way.

There is no other method of producing so quickly a growth of such valuable feed in the forepart of the summer as with Canada Peas and Oats. The Canada Pea part of the hay is rich in protein and contains the other ingredients of Cow Pea and Soy Bean fodder. This practice of Canada Peas with Oats should be more generally followed. It is a decidedly profitable crop from every point of view. We urge our customers, not now familiar with them, to give trial to the crop this year. Arrange your plans early so you can sow early. Engage your seed at once. See Price List.

Large quantities of Farmogerm are sold each season to inoculate the seed for this Canada Pea crop before it is planted. See description of Farmogerm on page 32. Inoculating this crop with Farmogerm will increase the growth of the Pea crop and add to the value of the succeeding crop that will be produced on this same ground.

Soy Beans

Note the many small nodules at roots. These contain nitrogen thus providing cheap fertilizer to crops that follow.

The profits from the growing of Soy Beans are greater and come quicker than from any other crop, except Alfalfa. The farmer that produces beef, pork, mutton, milk, will eventually grow Soy Beans. The quicker he begins to grow them the less he will lose by his delay in getting started. As a means of enriching run-down farms quickly, the Soy Bean and its close relation, the Cow Pea, cannot be matched. On poor land, too poor to grow Clover or Alfalfa, Soy Beans and Cow Peas can be made to produce great quantities of feed and will increase soil fertility while doing it. Soy Beans and Cow Peas are immense gatherers of nitrogen when properly inoculated. Read paragraph bottom page 28—"Facts About Soy Beans."

Add Soy Beans to Your Silage

One part Soy Bean growth to four parts Corn will make of your silage a perfect ration. The Soy Bean plant will supply the protein that the Corn lacks. You can grow the Soy Beans right in the same row as the silage corn, or plant the Soys separately. This practice is becoming more popular every year—very good results are obtained from it.

OUR STOCKS OF SOY BEANS include the very best varieties—all of them grown in the North (except the "Mammoth Yellows" which will not mature hereabouts—they were grown in North Carolina). We don't list a lot of new sorts. Really, many of the new sorts offered are only the old kinds renamed. Our stocks are all pure, clean, and of strong vigorous germination. Let us supply those you will plant this summer—and you will be pleased with results from them.

VARIETIES

"Wilson Black." This is a very good general purpose variety. It is one of the best for hay and bean production and for the silo. On account of its wonderful growth and slender stems and branches, the "Wilson Black" variety makes the finest hay. On poor ground Wilson Blacks will grow four feet tall, and on fertile ground they will get as tall as six feet. We think Wilsons will make a little more hay and hay of a little better quality than other varieties. This variety is early enough to mature beans in Pennsylvania, Ohio, New Jersey and States to the South. The Wilsons will do well on poor soils. We would give it good soil to produce forage—poor soil to produce beans. The Wilson is a medium size, jet-black bean. Will easily yield 20 bu. beans per acre—yields above 30 bu. per acre have been secured. Beginners not sure as to the variety they should start with, will do well to choose on the Wilson Blacks. It is a great variety for hay, forage, soiling, silage, and green manuring. See Price List.

"Ito San." This is a yellow bean. The earliest variety on our list. Matures nicely in Lancaster County in 85 to 88 days. This sort will produce a hay of fine texture—probably not as great a quantity of hay as some of the slightly later kind. Yields heavily of beans. Will mature in the high altitudes of Pennsylvania, and in the States of New York and Michigan. After the Ito San crop of beans has been threshed, the straw will be equal to Clover hay in feeding value. If you require an early sort, you can depend on Ito San variety as a dependable crop-per. See Price List.

"Medium Brown" known also as "Ohio No. 9035." This is becoming a favorite variety among many more northerly sections. Our section of Pennsylvania matures them very nicely. This Medium Brown is a very prolific producer of beans—also valuable as a forage variety. A grower of this variety in Berks County, Penna., writes us that they have averaged him 35 bu. of beans per acre—one year over 400 bu. from 12 acres. He adds: "I have tried out eight varieties in the five years I have grown soys, and the Med. Brown is the biggest yielder of beans, and I don't want anything better for in the corn." You will do well to select the Medium Brown variety, for it is a worthy yielder both of beans and forage, and an excellent sort to mix with your silage. See Price List.

Field of Wilson Black Soy Beans

"Medium Green." This is another double-purpose Soy for the North. If planted early, beans will mature well to the north of our State. The old Medium Green Soys showed a tendency to shatter badly, but by careful selection this fault has been overcome in the strain of this variety we offer you. Medium Green has excellent qualities as a good all-around variety, and is especially well liked for its use as a forage producer. See Price List.

"Mammoth Yellow." This variety will not mature beans in sections north of Virginia. It is grown very largely in the South, where unusually heavy crops of beans are yielded. It may be grown on soil so barren that other crops will die for want of fertility. "Mammoth Yellows" make a very tall growth—coarser in its texture than the other sorts here offered. This makes them valuable for Northern culture to plant with corn for silage or to plant expressly to plow under for soil improvement. See Price List.

"Mixed Soy Beans." We are sometimes able to buy small lots of Soy Beans that do not run strictly pure as to variety. These are then blended, and made into our "Mixed Soy Beans." For planting as a cover crop to turn under, these mixed soys will serve you very well. Will also save you a little money in regard to cost of the seed. They are of first-class quality—just as strong in germination as any of the straight varieties. See Price List.

HOW TO GROW SOY BEANS

Growing Soys need little more attention than growing the old standard crops and not nearly as difficult to grow as Alfalfa. We give the following directions:

1. **PREPARE YOUR SOIL WELL.**—just as you should for corn. Try to kill the weeds—especially if you are going to broadcast instead of plant in rows. Frequent cultivation in advance of planting season will accomplish weed killing.
2. **DON'T PLANT TOO EARLY.** The soil must be warm. A week or ten days after ideal conditions for corn is usually the safe time. Soys will rot in cold, wet soil, but will grow quickly in a warm seed bed. Planting Soys is permissible until early July, other conditions being favorable.
3. **DON'T PLANT DEEP.** 1½ inches is nearer right than any other depth. One inch may do and two inches does not mean failure.
4. **INOCULATION.** To get the full benefit from growing Soy Beans you must inoculate the seed. The gathering of nitrogen from the air by the roots will not take place unless you supply the

HOW TO GROW SOY BEANS (Continued)

germ to start the action. Soil from another Soy Bean field may be used. It is, however, most certain and more economical to use commercial inoculation for the purpose. We believe "Farmogerm" to be the best inoculation in the market and we highly recommend it. See page 32. "Farmogerm" is applied right to the seed before it is planted. It takes only a few minutes and the process is simple. The nitrogen gathered from the air and deposited in the soil in excess of the plant's requirement is worth every bit of expense connected with growing Soy Beans, so that the top growth of hay and beans with their high percentages of protein is clear profit.

5. PLANT EITHER IN ROWS OR BROADCAST. If you broadcast by hand and work in with a harrow, $1\frac{1}{2}$ bushels are required. If drilled in with a drill with all holes open, $1\frac{1}{4}$ bushels are sufficient. You must be sure to kill weeds ahead of planting time if you broadcast. As a rule, planting in rows is preferable, whether you want to grow the beans or produce hay, green fodder, silage, or if you want to turn under for soil improvement. Planting in rows saves seed and permits cultivation. You will have to cultivate as often as you do corn. Plantings are made with rows 20 to 36 inches apart and two to three inches apart on the row. Twenty to thirty pounds per acre needed by this method, depending upon exact width of rows apart and upon size of variety of Soy. The most successful Soy men we know grow in rows as close as twenty inches apart. You must plan your method of cultivation in connection with width of rows.

6. HOW TO PLANT THEM. Nearly every corn planter can be adapted to plant Soys by getting a special disc. Grain drills, however, are used more frequently. A nine-hole or a twelve-hole can easily be adapted for rapid work by plugging two out of every three holes. A nine-hole drill will plant three rows at a time. A twelve-hole drill will plant four rows at a time.

7. HARVESTING. To make good Soy Bean hay—cut when half the pods are full grown and when top leaves begin to turn yellow. Cut them when there is no dew. Let lie in swaths until leaves are wilted, but not brittle. Rake early in windrows, but let them thoroughly cure for several days. Then put them in small cocks and allow several more days. Prevent loss of leaves as far as possible.

8. FOR BEANS. Let stand until half of the pods are dry and most of the leaves have fallen off. Same may then be handled as advised above for hay. The old self rake is used by some for cutting. It gathers the stalks in convenient open bunches and permits gathering with but a slight loss from shattering. Haul to the barn or stack.

9. THRESHING. This may be done by flail or by grain threshers. If the Soy Beans are for seed, care must be taken not to crack or split them. The removal of the concaves in the grain threshers is necessary.

Corn and Soy Bean Roots showing how nitrogen sacks on bean roots feed the corn roots.

FACTS ABOUT SOY BEANS

Soy Beans have a higher protein content than oil meal, pound for pound.

You can grow 20 to 30 bushels Soy Beans per acre on poor ground.

One bushel Soy Beans contains as much digestible protein and as much digestible fat as six bushels of oats, or four bushels of corn meal, or six bushels corn and cob meal.

Ground Soy Beans are greedily eaten by all stock, are easily digested, have a tonic effect whether fed by itself or mixed with other feed.

Soy Bean hay cut before beans have ripened is greater in value of protein and fats than Alfalfa hay.

Soy Bean straw and hulls, from which the ripe beans have been threshed, is equal in value of protein and fat content to Clover hay. Fed to cows will cause an increase flow of milk.

Soy Beans will make two to four tons of hay per acre.

Soy Beans cut green and packed with corn for silage—1 part Soys to 4 parts Corn, will make a perfect ration of much more value than corn silage alone.

A handful Soys fed to horses each meal will keep hair and hide in perfect condition.

Colts, sheep and stock can be wintered on Soy Bean hay alone.

The unthreshed vines fed to hens will bring about early and sustained winter egg production.

Corn and Soys grown together can be hogged down with convenience and profit.

An acre of Soys will produce as much meat as two acres of corn.

Soys can be grown on land too poor and too acid to produce Clover.

Soys are a legume and gather nitrogen from the air. Your soil will improve while producing crops of valuable feed. There is nothing better to plow under for rapid soil enrichment.

Planted in corn, Soys will aid the corn crop rather than curtail it. The nitrogen gathered by the Soys becomes available to the corn.

Wheat following Soys yields 20 to 50 per cent. better than when it follows oats.

Cow Peas

The Cow Pea Crop occupies the same place in agriculture as does that of the Soy Bean. The crop has the same uses, namely:—the improvement of the soil by drawing from the air to the roots, great quantities of nitrogen—the production of hay—forage—silage—and peas. The hay has just about the same richness of protein and fats as that of Soy Beans and therefore same feeding values. Methods of growing, time of seeding and harvesting correspond with Soy Beans. Both crops are great producers of nitrogen when properly inoculated, and therefore splendid soil improvers. There are two chief differences between the two crops—viz., the Cow Peas can be grown on even poorer ground than Soys,—Cow Peas are more recumbent than Soys, and therefore more difficult to harvest. However, we offer varieties that have upright tendencies. For pasturing or hogging, or for turning under for soil improvement, the trailing habit is no objection. Statements made on previous page relative to the “Facts About Soy Beans” are equally applicable to Cow Peas.

Instructions for Growing Cow Peas

Important—Don't Plant too Early

Some folks confuse Cowpeas with Canada Field Peas. Please note this especially. Canada Field Peas are planted very early, mostly along with Oats—but Cowpeas dare not be planted until the ground is good and warm, or they will rot in the ground. Don't plant Cowpeas in ground that is too cold or too wet—this is strictly a warm-weather crop. Plant $1\frac{1}{2}$ in. deep. Follow general instructions on Soy Beans printed on previous pages, as your guide for planting, harvesting and threshing. Cowpeas. Inoculate the Seed with Farmogerm, so that the little nodules on the roots of the Cowpea plant will form and store up the nitrogen the plant will gather from the air.

Field of Cow Peas

Varieties of Cow Peas

“Whippoorwill.” This is an early variety that is perhaps more widely used than any other. It has been grown successfully in Pennsylvania, Ohio, Indiana, and other points in the same latitude. Whippoorwill is a good general purpose variety. Grows vigorously, matures early, is fairly erect, yields well both of hay and grain. See Price List.

The “Gray Crowder.” Also called the Gray Whippoorwill, is becoming a favorite in Cowpea sections. It is a speckled variety like the Whippoorwill. The Gray Crowder yields well of peas, plenty of hay, and has considerable root growth. These qualities make the Gray Crowder variety well-liked for its production of both hay and peas, and among the leading sorts as a soil improver. See Price List.

“New Eras.” We are rather partial to the New Era variety as an all-around variety for general culture—in the North and Middle Atlantic States. It is an early variety. In the South, two crops of New Eras are grown in one season. The New Era has more erect habits than other sorts. The crop of this variety can be mowed easily. The vines are fine with many branches, and on the whole the hay of this sort is more desirable than that of some other kinds. Beginners in Cowpea growing would do well in selecting the New Eras, whether they seek the peas, hay, silage, pasture, or soil improvement. See Price List.

“Blacks.” This variety yields heavily of forage, but grows probably less grain, is slightly later than the other kinds. Has the trailing habit. One of the best to plant in corn for pasture or for turning under for improving the soil. See Price List.

SUDAN GRASS

Originated in the African Sudan Country. It belongs to the Sorghum family. It is more like a grass than a corn. May be cut often for hay. It laughs at drought and will grow vigorously without any rain if once started. May be broadcasted, 16 pounds per acre, or planted in rows, three pounds per acre if three feet apart. Four to six pounds if rows are 18 to 24 inches apart. The rows should be as far apart as the tools available for cultivation will permit. See Price List.

Harvesting Sudan Grass

MILLETS

Millets are grown largely in the West, but do not have a place in Eastern agriculture except occasionally when drought cuts short usual supplies of hay and forages. Millets may be sown in June, or even in July, and will rapidly grow into heavy crops.

Golden Millet (formerly called German). This variety grows quickly—is easily cured—is of fine texture of stems—makes nutritious hay. Sow 3 pecks to one bushel per acre for hay. Only 1 peck to grow seed. Should be cut while blooming—before seed hardens in the head. Sow Golden Millet with cow peas for a well-balanced, nourishing feed, 3 pecks Millet and 1 bushel cow peas per each acre. Cut when Millet is in bloom, regardless of maturity of the cow peas at that time. See Price List.

Japanese Millet grows taller and finer than either Hungarian or Golden. It will grow on the poorest soils and no location is too far North for it to thrive. Some seedsmen in the West sell Japanese Millet as “Million Dollar Grass.” It is a wonderful grass on account of its rapid and tall growth and has its uses. Sow one-half bushel Japanese Millet per acre. See Price List.

Hungarian Millet is widely known and is a reliable sort. Sow three pecks per acre for hay and only a half bushel or less for seed production. See Price List.

ANNUAL HOG PASTURE

This is a mixture of spring grains, grasses, vetches, field peas, etc., fourteen different sorts, mixed together to be sown in the spring for rapid and rank growth of pasture suitable for hogs. We have not advertised this mixture heretofore, but have made it in large lots for hog raisers and have seen its benefits. This Annual Hog Pasture Mixture will positively and profitably fatten hogs without any other grain.

It is also fine pasture for other cattle of all kinds. Most of the plants in the mixture grow again after being pastured off. Sow 100 pounds per acre, about two inches deep. Try a few acres to begin with. When grain is high in price, “Annual Hog Pasture” can be used for live stock with great economy. See Price List.

Sorghum is of the Sugar Cane family. It is grown largely for sugar but the “Early Amber” listed by us is equally valuable for forage and may be grown in the United States. It is like corn in appearance. It may be cut two or three times in a season. It is excellent food, either dry or green, for cattle and live stock of all kinds. It stands drouth well and is a rapid grower. Has high feeding value. Plant in well-prepared soils. Don't plant until soil is warm. If you broadcast by hand, two bushels per acre is required on account of imperfect covering that follows. If drilled in, 1½ bushels per acre is sufficient. Plant one to two inches deep. Planting in rows like corn is best if you intend to cultivate several times. The seed should be one inch apart on the row and the rows just far enough apart to permit cultivation. By this last method, 10 to 20 pounds per acre is needed. Feed value of Sorghum is greatest if cut just before head appears. The younger it is cut the quicker will be the growth of the following crop.

“Early Amber” is earliest and most popular for forage. See Price List.

Cow Horn Turnips are grown for soil improvement along with Crimson Clover and alone in corn fields. Turnips are not legumes, but the Cow Horn variety reaches down into the sub-soil and brings up considerable fertilizer ingredients and adds them to the top soil. Besides this, the turnip improves its mechanical condition and adds considerable humus. The tops are eagerly eaten by sheep and poultry. The cost of growing is slight on account of ease of seeding and small amount of seed required. See Price List.

Sow "Dwarf Essex Rape" for Quick Pasture

Fine for cattle, hogs, and sheep. Frequently sown in mixtures of Oats and Canada Peas. It grows thickly in from six to eight weeks. Sown into corn the last cultivation will make a good Fall pasture. May be sown Spring, Summer or Fall. When plowed under, the soil is greatly benefited. Rape will do well in any kind of soil and thrive under almost any conditions. It can be grown at such a small cost per acre that it should be more largely used. Sow 5 pounds per acre. See latest Price List.

Sand or Hairy Vetch This is one of the most valuable friends of the farmer. It is valuable alike and at the same time for hay, pasture and for soil improvement. May be sown in the Spring or Fall. It is an annual, but it drops its seed freely and will renew itself and last for years. Various Experiment Stations have claimed that the value of an acre of Sand or Hairy Vetch to the soil is from \$16 to \$48 in commercial fertilizer. When sown by itself 60 lbs. of seed may be sown per acre. It is, however, advisable to sow a half bushel of Wheat or Rye with about 50 lbs. of Vetch per acre. The grain sown with it is to act as a support to the Vetch. The advantages of this Vetch over many of the other legumes is that it will thrive in the most barren soils and upbuild them at the same time. We furnish high-grade seed. Vetches should be inoculated with "Farmogerm." See Price List.

Spring Vetch. Known also as Common Vetch and Oregon Vetch. Will not survive our Northern winters. Is sown in early Spring with Oats, Spring Rye, or Spring Barley. Spring Vetch is much cheaper than the Sand or Hairy Vetch and must be sown a little heavier. See latest Price List.

WINTER SEED WHEAT

Winter Seed Wheat is our great specialty in the Fall. There is now growing for us an immense acreage which will be ready to deliver to our customers shortly after harvest time next July. Selected strains of the hardiest varieties known will be very carefully cleaned by most modern machinery, and offered to you. It will pay you to select a variety from the list we will offer.

Rates of Seeding

"Successful Farmers Recommend Heavy Seeding."

The right quantity of seed per acre differs in different sections—depends on the location and nature of the soils. It is agreed in all sections that spare seeding is not economical. Best qualities of seed are always found to be the cheapest in the end—the extra cost per acre is small and results are more satisfactory. The following table suggests quantities per acre and may be a helpful guide.

	lbs. per acre	lbs. per bushel		lbs. per acre	lbs. per bushel
Red Clover	8-14 Lbs.	60 Lbs.	Cane (Sorghum) Broadcast..	50-75 Lbs.	50 Lbs.
Alsike Clover	8-10 "	60 "	Emergency Pasture Mixture.	70- "	56 "
Alfalfa or Lucerne.....	15-20 "	60 "	Dwarf Essex Rape, Broadcast	4- "	50 "
Crimson or Scarlet Clover...	10-15 "	60 "	Vetch	50-60 "	60 "
Sweet Clover	12-20 "	60 "	Cow Horn Turnip.....	60-90 "	20 "
White Clover	6-8 "	60 "	Lawn Grass	60-80 "	60 "
Economical Mixture	12-20 "	56 "	Canada Field Peas (Broadcast)	150-180 "	60 "
Timothy	12-20 "	45 "	Cow Peas (with oats)	75-100 "	60 "
Blue Grass	40-50 "	14 "	Cow Peas (Broadcast).....	60-90 "	60 "
Red Top, Fancy, Solid Seed.	10-12 "	32 "	Cow Peas in drills.....	25-35 "	60 "
Red Top, Chaff.....	30-40 "	14 "	Soy Beans (Broadcast).....	60-90 "	60 "
Orchard Grass	30-45 "	14 "	Soy Beans in drills.....	20-30 "	60 "
English (Perennial) Rye Grass	35-50 "	24 "	Buckwheat	50-60 "	48 "
Meadow Fescue	30-50 "	24 "	Wheat	90-120 "	60 "
Brome Grass, Bromus inermis	42- "	14 "	Corn	8-10 "	56 "
Tall Meadow Oat Grass.....	25-35 "	14 "	Corn (Silage)	10-20 "	56 "
Hay and Pasture Mixture....	30-35 "	32 "	Rye	85-100 "	56 "
Golden Millet	30-50 "	48 "	Oats	70-100 "	32 "
Japanese Millet	15-25 "	32 "	Barley	95-120 "	48 "
Hungarian Millet	30-50 "	48 "	Speltz	75-90 "	40 "
Sudan Grass (Broadcast)....	16-18 "	48 "	Potatoes	600-900 "	60 "

What Farmogerm Is

Farmogerm is a pure culture, or growth of nitrogen-fixing bacteria that has been selected and bred up to transform large amounts of nitrogen from the air into soluble nitrates.

These bacteria are grown in a jelly, or food, in which they remain active for long periods of time, and sent out in a bottle which admits the necessary supply of pure air, yet keeps out destructive contaminations.

If Alfalfa can be grown on hot, sandy land of South New Jersey, why can't you grow it?

What Farmogerm Will Do

Unless the soil is very acid or wet, Farmogerm will:—

1. Increase the yield and quality of legume crops, giving quicker growth and earlier maturity.

2. Increase the food value of legumes.

3. Make legumes grow in new localities, where they cannot otherwise be grown successfully.

4. Supply nitrates to other crops growing with the inoculated legume crop.

5. Enrich the soil for future crops, thereby increasing the permanent value of the farm. Better crops—better soil—less fertilizer—less labor.

INOCULATE WITH

FARMOGERM

It Means Better Crops—Better Soils—Less Fertilizers

Farmogerm is the highest grade—most effective—most successful inoculation for legume seeds of all kinds. We say this after having made investigation of cheaper articles sold for the purpose. There are a number—but we fear to handle them. Farmogerm has an important advantage in that it may be purchased in advance of the time it is needed and be kept on hand ready for use—without danger or risk of spoiling. This is due to a peculiar tube that is inserted in each bottle of Farmogerm. See description in second paragraph above. Farmogerm is endorsed by farmers, Federal Agricultural Department, and by many State Experiment Stations.

Unless your soil naturally contains the proper bacteria, you cannot successfully grow Alfalfa, Soy Beans, Cow Peas, Field Peas, Sweet Clover, Vetches, Crimson or other Clovers, without inoculating your seed. The best form of inoculation is Farmogerm. Its careful use will insure success of all legume crops if all the other ordinary precautions have been taken.

Farmogerm is useful for only legume crops—that is, plants that gather nitrogen at the roots. The bacteria is different for each crop. When ordering, be sure to state for what crop you want to use each bottle—for all contain different germs. You can easily apply Farmogerm to your seed—the operation takes but little time—and is easily understood. Full directions with each bottle.

IT PAYS TO BUY THE BEST INOCULATION—BUY FARMOGERM AND SUCCEED!

Prices: $\frac{1}{4}$ -acre size, 50c; 1-acre size, \$2.00; 5-acre sizes, \$8.00.

Write for special quotations on 50- or 100-acre size.

INDEX

Alfalfa	5-8	Cow Peas	29	Red Top	9
Alsike	3	Crimson Clover	4	Rye—Spring	24
Barley	3	Economical Mixture	3	Seeders	4
Bromus Inermis	10	Emmer	24	Sorghum	30
Buckwheat	24	English Rye Grass	10	Soy Beans	26-28
Canada Blue Grass	10	Farmogerm	32	Speltz	24
Canada Peas	25	Hay and Pasture Mixture.....	9	Sudan Grass	30
Cane	30	Kentucky Blue Grass	9	Summer Pasture Mixture	30
Cleaners	33	Lawn Grass	9	Sweet Clovers	4
Clovers	1-4	Meadow Fescue	10	Tall Meadow Oats Grass.....	10
Clover		Millets	30	Timothy	8
Medium Red	3	Oats	10-15	Turnips	30
Mammoth	3	Orchard Grass	10	Vetch	31
Alsike	3	Potatoes	16-17	Wheat—Spring	23
Corn	18-23	Rape	31	Winter Seed Wheat.....	31

Why HOFFMAN'S Seed Corn is Different

... and why
it assures a
greater yield

CAN you afford to go to all the bother of selecting your own seed corn yourself? Can you afford to take the time before freezing weather to dry and store it in the proper manner? Can you afford to wait until planting time and then hurriedly plant crib seed that has not been tested? Very few farmers do have the time and still fewer have the necessary equipment. In fact, very few seed-houses have the most scientific facilities—and in this respect Hoffman's now stands alone in the East.

Here, in the entirely new building pictured inside, designed and equipped throughout for the one special purpose of preparing seed corn, we have solved the problem of keeping alive the delicate life-germ of the kernel and preserving it from attacks of cold, mold and disease.

Seed corn troubles are generally due to too much moisture, and if the corn is dried down to 12% moisture before cold weather, most of the troubles and dangers disappear. Freezing is the greatest danger. Corn containing 20% of moisture will not stand a temperature of even 15 or 20 degrees. The seed-germ will be killed . . . and yet it may surprise you to know that much Eastern corn entered this winter season bearing from 25% to 35% of moisture. Reduce the moisture to 16% or 18% and it is still far from safe, be-

Seed Corn like this
costs you only 50c
per acre more than
ordinary corn.

cause such corn will likely mold and heat in the spring. Both mold and heat, like the cold, will kill the germ.

In addition to these easily recognized troubles, it should be remembered that seed corn germs, if not killed outright, will lose their vigor if excess moisture is allowed to remain during the winter. There is an action going on that may be compared to breathing—and the moisture tends to stifle it. Such seed may sprout in a germination test and yet lack the vigor to grow to large and productive size in the field when conditions are not extra good.

* * *

But let us take a look at just how Hoffman's seed corn is handled. It will show us a way to add several dollars to the value of every acre planted and save a lot of work and uncertainty.

HOFFMAN'S NEW *for* SEED

*H*OFFMAN'S seed corn is raised right here in Lancaster County, where the soil is rich and conditions are ideal. It is grown by farmers who have supplied us for many years. Our experts, throughout the whole season, are out in the fields watching the crop and the preparations for it. Only the choicest corn is finally selected. Before cold weather, this is brought into our plant where it is carefully inspected and prepared for the dryer.

This drying system is entirely new in the East, but not new in the sense that it is untried. In the West it has been a wonderful success for some time. It consists primarily of two large specially constructed rooms with basements, each with a capacity of 1500 to 2000 bushels at a time. The floors of these rooms are made grate style, with openings between each board placed edgewise (see cut at the right). The dimensions of these rooms and the floor grating are carefully calculated so that a blast of warm air driven into the basement may be distributed equally throughout the whole room above.

Some 3000 to 4000 bushels of corn in drying racks are placed in these two rooms in such manner as to allow complete air circulation around and between the ears. Everything being ready, the doors are tightly closed, the intakes and ventilators properly adjusted, the steam-heating plant started. Enormous fans, shown at bottom of page, with a capacity of 8000 cubic feet of air a minute, are then put in operation, bringing in air, passing it through an ingeniously designed steam-heated radiator, illustrated at the extreme right, and into the

In upper picture we see the corn as it is received and placed in racks. Just below is shown one of the Drying Rooms with its grated floor.

TREATING PLANT CORN

Directly below is shown the automatic oil heaters; also the mammoth fan and pipe. At the extreme right the air intake and steam heated radiator which heats the air drawn in by the fan.

basement of each room. The air then passes rapidly up through the grated flooring and open drying racks. Heated to exactly the right temperature, it soon takes up the moisture from the corn and passes off through the ventilators.

The air brought in by the great fans is regulated with extreme care. Sometimes nothing but pure, outside air should be used. At other times such air dare not be used. Conditions change constantly. An expert must be watching everything closely. He needs the help of the latest scientific instruments and controls. Great heat is not required—nor ever allowed. In fact, scientific air control, keeping the air at the proper temperature and proper humidity, is the secret of the process.

The heat is supplied by the very latest type of automatic oil-burner, operated by thermostatic controls placed in the drying rooms. By means of hygrometers and numerous thermometers the expert in charge keeps a double check on conditions and knows exactly how matters are progressing.

After three to six days in the drying room, the moisture in the corn is reduced to 12%. It is then removed from the drying rooms and passed on to the tipping and butting process. Finally the choice middle parts of the ears go through the shellers. It is then ready for the cleaners and graders.

The cleaning and grading process is expensive to us—yet most important to you. The lightweight, immature and broken

Completely equipped Testing Room for examining and testing each lot of seed received.

kernels are removed and you plant only plump, uniform, healthy seed.

The picture shown at top of this page gives you an idea of the various forms of testing equipment employed here. The many weighing and measuring devices, powerful magnifying glasses, automatically controlled germinator, the latest moisture-testing equipment, etc., all have their part to play before the final O. K. is put on each of the different lots of seed corn or other seeds handled.

Corn prepared in this extensive process which this company has introduced in the East may be stored in a cold place with no danger of freezing and where mold and diseases cannot grow. In the spring it will show not only the very highest germination tests, but it will be vigorous and free from disease.

Finally, let us say that as surprising as it may be, we are able to supply you with genuine Lancaster County seed corn, prepared in this thoroughly scientific manner for just about **fifty cents an acre above the cost of ordinary corn!**

Select your variety from our catalog and place your order now for prompt shipment.

A. H. HOFFMAN, Inc.
LANDISVILLE, LANCASTER CO., PENNA.

Price List of A. H. HOFFMAN, Inc.—Farm Seeds

Landisville, Lancaster County, Pennsylvania

QUOTATIONS SUBJECT TO CHANGE WITHOUT NOTICE

Seed bought from us that is not found to be satisfactory upon its arrival, may be returned at once and money will be refunded with freight. Will not be responsible in any way for seed or resultant crop after it is planted.

—ISSUED—
Jan. 31, 1921.

Half Bushel at bushel rates unless otherwise quoted. Pound prices apply to less than half bushel lots. Bags are Free and not weighed in. Freight Paid Offers No. 1 and No. 2 apply. See bottom of Page.

Weight Prices Per
Per Bu. Lb. Bu.

Weight Prices Per
Per Bu. Lb. Bu.

IMPORTANT!

BAGS needed to ship all Seeds ARE FREE. WE PAY THE FREIGHT per the 'Freight Paid Offers' below. These are very expensive items this year - don't overlook them.

CLOVERS

"Extra" Medium Red	60.26	14.75
"Safe" Medium Red	60.25	14.00
"Northwest" Red	60.28	15.75
"Extra" Mammoth Clover	60.27	15.50
"Extra" Alsike	60.31	18.00
"Northwest" Alsike	60.33	19.00
White Sweet Clover	60.17	9.50
Economical Mixture	56.24	12.25
White (Dutch) Clover	60.67	39.00
Crimson Clover	60.11	6.00

ALFALFA SEED

"Northwest" brand 99½	60.28	16.00
"Extra" brand 99½	60.26	14.50
"Grimm" Alfalfa	60.62	36.00

TIMOTHY SEED

"Farmers Choice"	45.11	4.40
"Northwest"	45.13	5.20

GRASS SEEDS

Kentucky Blue Grass	14.33	4.40
Canada Blue Grass	14.25	3.00
Red Top--Hulled	32.17	5.20
Red Top--Unhulled	14.13	1.60
Orchard Grass	14.22	2.70
English Rye Grass	24.12	2.60
Bromus Inermis Grass	14.45	6.00
Meadow Fescue	24.30	6.70
Tall Meadow Oat Grass	14.40	5.40
Hay & Pasture Mixture	32.19	5.50
Hoffman's Lawn Grass	20.32	5.80

"CLIPPER" SEED CLEANER #1-B \$38.00
#2-B \$45.00 Freight Paid in East.

SEED CORN. "Red Cob White Ensilage" (Shelled) @ \$3.00 per bu.

"Lancaster County Sure Crop" - "Reid's Yellow Dent" - "White Cap Y.D."
"Golden Yellow Dent" - "Long's Champion" - "Early Leaming" - "Johnson County White" - @ \$3.75 bu. (Shelled) - ½ bu. \$2.00; peck \$1.25; ½ pk 60¢.

SEED POTATOES. Maine Grown - good quality - "Irish Cobblers" -

"Green Mountains" - "State of Maines" - "Carman #3" - "Sir Walter Raleighs" - @ \$6.90 per 11-peck sack. "Early Rose" @ \$7.25 per sack of 11 pecks. Freight paid per offers below. Shipment when weather permits in spring. Orders booked now require \$1 per sack payment in advance.

United States Food Administration License No. G-37831

United States Wheat Director License No. -041072 EH.

SEED OATS

"White Russian" (Side oats)	\$1.50
"Peerless" Oats	1.10
"Silvermine" Oats	1.20
"Swedish Select" Oats	1.25
"Bumper Crop" Oats	1.35
"Shadeland Climax" Oats	1.75

MISCELLANEOUS SEEDS

Winter or Hairy Vetch	60.16	9.00
Spring Vetch	60.9	5.00
Dwarf Essex Rape	50.11	4.80
Golden (German) Millet	48.7	3.00
Japanese Millet	32.9	2.75
Hungarian Millet	48.7	2.90
Early Amber Sorghum	50.6	2.70
Cow Horn Turnip Seed	45¢	1b.
Sudan Grass Seed	9¢	1b.
Summer Pasture Mixture	8¢	1b.

PEAS & BEANS

Canada Field Peas	3.90
"Mammoth Yellow" Soy Beans	3.20
"Wilson Black" Soy Beans	4.50
"Ito San" Soy Beans	4.20
"Medium Brown" Soy Beans	4.25
"Black" Cowpeas & "Gray Crowders"	4.20
"New Era" Cowpeas	4.60
"Whippoorwill" Cowpeas	4.30

SPRING GRAINS

Marquis Spring Wheat	60	3.40
Spring Rye	56	3.10
Bearded Spring Barley	48	2.15
Speltz (Emmer)	40	1.95
Japanese Buckwheat	48	2.30

Inoculate With FARMOGERM! IT PAYS!
State for what crop to be used.
¼-Acre size 50¢--1-Acre size \$2.00
--5-Acre size \$8.00.

Freight Paid Offer No. 1 Upon order of 300 lbs. or more to be shipped at one time to same destination, we Prepay the Freight to any R. R. Station in Penn., Ohio, N. J., N. Y., Md., Va., Del., Mass., R. I., Conn., and W. Va.

Freight Paid Offer No. 2 If you are not in our Freight Paid Territory and order 300 lbs. or more shipped at one time, we allow 30¢ per 100 lbs. to help pay freight charges. Deduct this when ordering.

Send Orders to A. H. Hoffman, Inc., Landisville, Lancaster County, Pa.

If You Grow Your Own Seed You Need a "CLIPPER" CLEANER

The No. 1-B Clipper Seed Cleaner

so as to get the correct speed of the fan and if the turning is regular, you can remove the light grains from the heavy, to the extent that the weight of the grain being cleaned can be raised from three to five pounds per bushel. "Clipper" Cleaners are used by Agricultural Colleges, Experiment Stations, seed breeders, Seedsmen generally in the United States, Canada, Europe, Australia, South America, and New Zealand, in fact, all over the world.

We give here, Sectional View of "Clipper" Cleaners, which is the same for No. 1-B, and No. 2-B, showing Vertical Air Shaft, Dust Hood, Grain Box, and other special features of the "Clipper" Cleaners.

Fig. 1—Shoe, with two receiving grooves for screens. The screens are securely held in place by a compressing rod.

Fig. 2—Straw-Spout, for carrying off large particles, straw, etc., etc.

Fig. 3—Screening Spout, for removing sand, fine seeds, etc. It is opened by pulling out slide, above spout.

Fig. 4—Vertical Air Shaft, through which the draft passes upward, carrying off chaff, dust, etc., through Dust Hood (see Fig. 6). The perfect grain and seed fall and pass out at Fig. 5 into the Grain Box, which will hold 3 bushels. It has a Lifting Board at the end, which allows the contents to be easily scooped into sacks. **Our Grain Box prevents waste, makes sweeping floors unnecessary**, and also furnishes convenient storage for screens and all detachable parts of the machine, when not in use.

Fig. 6—Dust Hood, through which chaff dust and worthless matter are discharged. All light, imperfect and foreign grain and seeds are discharged at opening (see Fig. 7).

Fig. 8—Fan, with iron arms, fitted on a turned steel shafting, equipped with Cone Pulley. This allows changing the speed of the Fan, which is necessary to properly clean grain and seeds of varying weights.

No. 1-B "Clipper" is a farm size hand mill that will clean twenty bushels Seed Wheat per hour or ten bushels Clover or Timothy Seed per hour. Dimensions are: length, 4 ft. 8 in.; width, 2 ft. 2 in.; height, 3 ft. 8 in.; weight, crated, 185 pounds.

Twelve Screens, 19 in. wide and 22½ in. long, go with the No. 1-B Mill, an outfit of screens suitable for cleaning Seed Wheat, rye, oats, corn, barley, peas, beans, clover, timothy seed, other grass seed, garden and vegetable seeds.

Plain Directions for Separating go with each mill. These are so easily understood that anyone can learn in a few minutes how to make the most delicate separations.

The No. 2-B Clipper does exactly the same work as the No. 1-B. Its capacity per hour is 25 bu. grain and 15 bu. grass seed. The screens (12 in number) are 6 in. wider than the No. 1-B screens. Dimensions, of No. 2-B are 4 ft. 8 in. long, 2 ft. 8 in. wide, 3 ft. 8 in. high. Crated weight, 210 lbs. No. 2-B can be run easily by hand for cleaning grass seed, but for cleaning grain some kind of power should be applied—¼ horse power is sufficient.

Price of No. 1-B Clipper is \$38.00

Price of No. 2-B Clipper is \$45.00

Freight paid to any railroad station in the United States, East of the Mississippi River.

Send orders for Clipper Cleaners to A. H. Hoffman, Inc., Landisville, Pa.

No. 2-B Clipper Seed Cleaner

HOFFMAN'S

"Northwest" brand

CLOVER SEED

*IS Hardier — Earlier
More Productive*

*Requires Less Seed Per Acre
Economical to Sow*

SEED OATS

*"Shadeland Climax" Variety
Grows Long, Stiff Straw — Yields Heavily*

SIX OTHER KINDS

*"Side" and "Tree" Types
Sound — Unstained — Heavy*

Portion of 84-acre field producing "Northwest" brand Clover Seed

A. H. HOFFMAN, INC., Landisville, Lancaster County, Pa.