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Spring 1895.

PERMANENT

PASTURES

AND MEADOWS

FARMER
SEED
Co.

Otto Kozlowski.
MANAGER

Wm. Kueker.
SECRETARY

GRASS IS KING.

MORE GRASS-MORE CATTLE; MORE MANURE-MORE GRAIN,
MORE CATTLE-MORE MANURE; MORE GRAIN-MORE MONEY.
BUT NO GRASS, NO CATTLE, NO MANURE, NO GRAIN, NO CROPS, NO MONEY.

FARIBAULT, MINN.
FORMERLY CHICAGO, ILL.

A Few Words to Our Old Friends and Patrons.

ANOTHER year has gone by and, at the beginning of the new one, we send you this our Annual Catalogue, with a wish for very a happy and prosperous new year.

Many of us have, during the year just gone by, suffered severely from the long continued drought or other misfortunes, but we all look to the future for better times, and all signs go to show that we will not be disappointed.

We all must make preparation for seeding again this coming spring, and in many cases will have to do the work over again from last spring, the severe drought last summer killing nearly all new seedings of grass or clover. In this our catalogue, which we also named our book on **Permanent Pastures and Meadows**, all will find useful information and much help on this so very important subject. **Grass is King!** How more grass and permanent pastures and meadows can be obtained is very important now at this time, since the dairy business is about the only profitable branch of farming now; but this makes it necessary to provide for more and better grass and hay as well as giving more attention to the cultivation of forage plants.

About permanent pastures and meadows and how they can be obtained, we would ask all to read pages 13, 14, 15 and 16. Then turn to pages 17, 18, 34 and 63 and read some of the letters of our brother farmers who have sown our Clover-Grass Mixtures and what they think of them and the results to be obtained from a well-selected mixture of grasses and clovers.

The growing of field seeds and grain is also very important, and we give much attention to it. Our customers will realize that no one has better facilities for producing such superior grades and qualities of the best varieties of Oats, Wheat, Barley, Seed Corn, Seed Potatoes, etc., as we have right here, and our prices are right. We have not only better facilities for producing and growing superior **Northern-grown** seeds of all kinds than any other seedsman in this country, but we are prepared to handle all orders carefully and give prompt attention to them. When we gave up our store and warehouse in Chicago last spring, we built here in Faribault, Minn., a warehouse 70 feet long by 30 feet wide, with 3 floors, which gives us over 6,000 square feet of floor space for grass and field seeds, besides a very large cellar with a capacity for over 5,000 bu. of seed potatoes, besides which we have other cellars filled with the finest and choicest stock we ever had. All can readily see from this that we are well prepared for growing as well as cleaning and handling all kinds of seed and packing and shipping them promptly, for **promptness** is one of the most important features of the seed trade. By special arrangements with the railroad companies we can ship all orders from any part of the country without delay and at the lowest rates of freight to every point, just as well as we could from Chicago.

No order is too small nor none too large for us to be filled to your entire satisfaction. We fill many orders from our brother farmers every spring amounting to from \$50.00 to \$100.00 each; one order from La Salle County, Ill., amounted to \$317.75, from one farmer only, in one order for our superior Northern-grown Field Seeds and Clover-Grass Mixtures; and not only do they send their orders to us one year but every year regularly. This shows how carefully growing Northern-grown seeds is appreciated by our brother farmers.

Shall we not also have a chance to fill your orders this spring? We shall be pleased to receive at least a trial order from all those who have never dealt with us and receive this catalogue, that we can demonstrate that no one can supply better, and Northern-grown seeds than the **FARMER SEED CO.**

Yours to command,

FARMER SEED CO.,

O. KOZLOWSKI, Manager.

FARIBAULT, MINN., January 1, 1895.

A Few Suggestions About Ordering.

In sending and making out your order please use the order sheet and envelope we send with every catalogue.

The Full Address, including the Name, Postoffice, County and State, should be plainly written in every order sheet as well as in every letter sent to us, and no matter how often you have written us, please give your full address every time. We receive quite a number of orders with money enclosed, and a lot of letters every season, where either the name, postoffice, state, or all three, are omitted, and as much as we would like to fill these orders or answer the letters, we cannot do so. **Please see, also, page 60.**

Quick Shipment is our motto, and our facilities for packing and shipping are such, that every order for seeds leaves our warehouse within 24 hours (or 48 hours at the latest) after it is received, and we have to work day and night during February, March and April so we can do it. As potatoes cannot be sent during the extreme cold weather, these orders are acknowledged and shipped as soon as the weather moderates. We notify our customers by postal card of the receipt of the order and shipment of the seeds ordered, and for larger orders for Grass Seeds or Clover-Grass Mixtures, etc., we send the duplicate shipping receipt.

As prices on everything (except a few kinds of seeds, like Timothy or Clover,) are plainly marked in the catalogue, the necessary amount of money for the seeds can be easily found out and sent with the order. We fill orders only when the money is sent with the order. Write for prices on Timothy or Clover as mentioned on page 8. For large orders on Grass Seeds or other Field Seeds, write for special prices.

How to Send Money.—Money can be safely sent either by **Postoffice Money Order, Bank Draft on Chicago or New York, Express Money Order,** or where any of these cannot be handily obtained, then send the money with your order in a **Registered Letter.** We are responsible for all money sent us in this way. We assume no risk of loss in the mails where currency, silver or stamps are sent in ordinary letters, although we deem it quite safe to send small amounts that way. Please send postage stamps only for amounts less than \$1.00, if possible, and we prefer the 1 cent stamps during January and February; after that, 2, 5 or 10 cent stamps. Be careful not to moisten them. Letters, also, will often get damp, causing the stamps to stick together, resulting in the destruction of the stamps and the order. This occurs frequently.

The prices quoted on Grass Seeds, Clover-Grass Mixtures, Seed Grain, Potatoes and other heavy Farm Seeds, are for shipment of these seeds by freight, transportation charges being paid upon the receipt of goods. By special arrangement with the railroads, all orders will reach our customers from here just as quick as we could formerly ship from Chicago.

Where small quantities of Farm Seeds, such as Potatoes or other seeds, are quoted **post-paid, by mail,** this means that we send the goods free by mail to your postoffice at the price given there; while **by express or freight** means that the transportation charges are paid when the seeds are taken from the depot. Our customers will do well to leave the way of how to ship to us and we will use our best judgment in sending the order via the quickest and cheapest way, and think that with our large experience gained by shipping so many thousands of orders every season, we can do well for you. If you do wish your seeds to come by express, then please state so. Please note the prices, and rules about shipments of Garden Seeds, in the Garden Seed Department, beginning with page 41. Larger orders for Garden Seeds can be sent by freight to good advantage, and we pack securely in strong boxes for shipment by freight.

Our Prices.—We all know that the very unfavorable weather the past season has cut crops short all around and prices, therefore, will be much higher. However, we are glad to say that we can make lower prices on nearly everything than ever before, as our customers will see by comparing this catalogue with our last year's book. Many will ask, How can you make lower prices this year when everything should be higher? We say, Because we have reduced our expenses considerable. We do not pay any rent or have other large sundry expenses which are necessarily attached to doing business in large cities; besides, we have the facilities and the experience to grow nothing but the best seeds here and for less money than any one else can do it, and our brother farmers shall have the benefit in low prices and the best quality of seeds. Please note our low prices on Field Seeds, and, besides, think for a moment what it means to buy your seeds direct from the growers and farmers, instead of sending to city seedsmen who know but little about farming. Look at our prices for Garden Seeds and remember that not only our prices are low, but also in the size of our Seed Packets we aim to be more liberal than other seedsmen.

We are determined to grow and distribute nothing but the very best seeds that it is possible to produce, and to do business so as to give our customers complete satisfaction, and the thousands of complimentary letters we annually receive testify that the crops raised from our Grasses, Clovers and Clover-Grass Mixtures, as well as other Farm Seeds, give satisfaction, and that the quality of our seeds is the best that can be obtained.

We ask a careful reading of pages 17, 18, 34 and 63.

DESCRIPTIONS OF VARIETIES OF

NATURAL GRASSES

Adapted to all soils, climates and conditions, for permanent pastures and meadows.

MORE GRASS, MORE COWS AND MORE MILK; MORE COWS, MORE MANURE; MORE MANURE, MORE GRAIN; MORE GRAIN, MORE MONEY. — *Dr. J. Kuehn.*

BUT NO GRASS, NO CATTLE; NO CATTLE, NO MANURE; NO MANURE, NO CROPS; NO CROPS, NO MONEY.—GRASS IS KING!

Before you lay this Book aside, please read the description of the Grasses and Clovers; the different Clover-grass Mixtures adapted for most any kind of soil, and what our customers say about them on some pages of this book. If you intend to sow down to grass in the spring, we should be pleased to correspond with you, if the particular Clover-Grass Mixture adapted for your soil is not in this book.

1. MEADOW FESCUE.

Festuca pratensis.

One of the best and most valuable of natural grasses, also known as "Randall's grass," and "ever-green grass." Although it succeeds well in almost all soils, it does best on moist land. It is particularly valuable as a pasturage grass, being one of the earliest in the spring and the latest in the fall. It is very nutritious and greedily eaten by all kinds of stock, and very fattening. It is very hardy, never grows in tufts, and being tender and succulent, makes excellent hay. Is a perennial, 2 to 3 feet high, flowering in June and July. One ounce of the seed contains 20-200 kernels.

2. MEADOW FOXTAIL.

Alopecurus pratensis.

Although this grass closely resembles timothy, but flowering so much earlier, the flower spike being more slender, soft and shorter, it need not be mistaken for timothy. Its highest state of perfection is attained in moist, rich and strong land, although it thrives on all soils, excepting gravels and dry sands. For permanent pasture it is very valuable, being of early and rapid growth and endures close cropping. It is remarkable for the large quantity of leaf it produces, both for early and late fodder; forms a luxuriant aftermath and quickly revives after a long drought. Is a perennial, 2 to 3 feet high, flowers in May and June. One ounce of the seed contains 55,000 kernels.

For Prices see the price list of Grass and Clover Seed on page 12.

See the Special Offer on page 17 about the Chicago Seeder. Nothing is so well adapted for sowing Grass Seed or Grain, Flax, etc.

3. TALL MEADOW OAT GRASS.

Avena Elatior.

Is a most valuable grass for either hay or permanent pasture; is very luxuriant in growth, stools well, withstands drought, is very hardy and produces abundance of early and late foliage which is highly relished by cattle. After being mown it produces a very thick aftermath. It thrives on all kinds of soil except dry sands and very wet land, but succeeds best in deep, rich sandy soils. It is well adapted to grow with orchard grass for hay or soiling, both are tall and come on well together, to cut early and frequently, and also for late pasturing. The Tall meadow oat grass stools well and fills up the interstices between the tufty orchard grass, which grows in bunches. Is a perennial; 3 to 5 feet high, flowering in May and June. 1 ounce of the seed contains 12,500 kernels.

For prices,
see
Price List
on
page 12.

4. TALL FESCUE.

Festuca Elatior.

This valuable grass is found throughout Europe and also in this country, where it is highly valued for permanent meadows. Though coarse and robust in habit, it makes a very good quality of hay, which is very nutritious and greedily eaten by all stock. Being also very productive, giving larger quantities of hay than many other grasses, it should be included in all mixtures for permanent meadows for moist and strong soils. It is also a good pasture grass and in Virginia it furnishes cattle good grazing in midwinter. Not being affected by overflowing and naturally adapted for low lands where the soil is moist and strong, this is one of the best grasses to sow in marshes or places which are often under water. It is a perennial; 3 to 5 feet high, flowering in June and July. 1 ounce of the seed contains 11,000 kernels.

Read what our patrons in all parts of the country, who have tried our Clover-Grass Mixtures for permanent pastures and meadows, say about it on a few pages of this book. Try one acre this spring; the cost is but small, nothing when compared with the benefit to be derived. You will not regret it.

5. ORCHARD GRASS.

Dactylis Glomerata.

One of our native and most widely known of all the grasses. On account of its earliness and quick growth it is of exceptional value for permanent pastures. It furnishes the first green bite in the spring and the last in the fall, is quick to recover from close cropping, even thrives better the more it is cropped, and is heartily relished by all kinds of stock. It should not be sown alone, as it grows in tufts, but in a mixture with other grasses it should be included, so as to get a close and even sod. For permanent meadows it is well adapted to sow with Meadow Foxtail and Tall Meadow Oat, these are all early and come on well together, flowering about the time of red clover, which can be included; but it should not be sown with Timothy as it blossoms about 3 weeks earlier. Orchard grass, like all the natural grasses, should be cut about the time of flowering, or the hay becomes hard and loses its nutritious qualities; although it grows on all land, it thrives best on deep, rich, sandy loam or clay soils. It will stand drought, keeping green and growing when other grasses are dried up, and being very hardy is of especial value for our northern states, where it don't winter kill. Indeed it has recently been found in Alaska. It is a perennial, 3 to 5 feet high, flowering in May and June. 1 ounce of the seed contains 30,000 kernels.

6. HARD FESCUE.

Festuca Duriuscula.

It is one of the smaller fescues and of great value on account of its hardness and drought resisting qualities, therefore being well adapted for dry hill side pastures and uplands, preferring to grow on light sandy soils. It is well liked by all kinds of stock and its presence in hay indicates a superior quality. After being mown it produces a large quantity of food. It is a hardy perennial; 2 to 3 feet high, flowering in June. 1 ounce of the seed contains 26,000 kernels.

For prices see Price List of Grass and Clover Seeds on Page 12

**Now is the time to sow our
Clover-Grass Mixtures for either
permanent Pastures or Meadows.**

7. ITALIAN RYE-GRASS.

Lolium italicum.

A well-known variety of our natural grasses, being unequalled for producing an abundance of nutritious feed. It is remarkable for its quick growth and of especial value to sow in clover fields or in places where the clover has winter killed, it will then mature and ripen together with the clover when sowed early enough in the spring. On our trial field we sowed a two-acre field with Italian Rye grass and Crimson clover the middle of April, which was ready to cut by the middle of July and yielded then $1\frac{1}{4}$ tons of hay per acre, the aftermath was fully as heavy. Being very early and on account of the quick successive growth when closely cropped, it is well adapted for pastures, but being not a perennial although living 3 to 5 years, and giving the heaviest yields in the first and next 2 and 3 years after sowing, it is of great value for alternate husbandry. It grows on almost any soil, but thrives best on rich, moist land. Where the ground is favorable, and especially if irrigated, it produces immense crops, being cut 4 or 5 times and yielding as high as $7\frac{1}{2}$ tons dry hay per acre. It is 2 to 4 feet high, flowering in June. One ounce of seed contains 19,000 kernels.

8. ENGLISH RYE-GRASS.

Lolium perenne.

A very valuable and well-known variety, especially for permanent pastures. It will endure close cropping and grow up in a short time after being cut and produce an abundance of fine foliage, which remains bright and green throughout the season; consequently it is also well adapted for lawns and meadows. It grows well on almost any land, but prefers strong, rich soils, where it gives the heaviest yields. It resists drought and is also very hardy, succeeding well in our north-western states. It is equally well adapted for permanent meadows, where it furnishes large quantities of very nutritious hay, which is well liked by all kinds of stock. It is a perennial, 2 to $3\frac{1}{2}$ feet high, flowering in June. One ounce of seed contains 14,500 kernels.

9. WATER SPEAR GRASS.—*Glyceria aquatica.*

A variety which prefers low and wet soils, therefore of great value for land which is often overflowed or under water, and where other grasses don't succeed or being drowned out. Although it grows coarse and robust it gives large quantities of very nutritious hay, which is well liked by all kinds of stock. It is perennial, 4 to 5 feet high, flowering in July. One ounce of seed contains 12,500 kernels.

10. FLOATING MEADOW GRASS.—*Glyceria fluitans.*

Like No. 9, this variety is invaluable for improving low and wet meadows or marshes, it succeeds best on moist, wet land which is often under water, it will even grow in cold water. These two varieties are indispensable for meadows in wet and low places or along streams and should be sown in a mixture with Fowl Meadow (No. 12) and Rough Stalked Meadow (No. 11), these latter two varieties being very fine and tender, and not so high, this mixture makes an excellent quality of fine hay. Floating Meadow is a perennial, 3 to 5 feet high, flowering in July. One ounce contains 12,000 kernels.

11. ROUGH STALKED MEADOW GRASS.—*Poa trivialis.*

This is a very valuable and most excellent variety, either for permanent pastures or meadows. It succeeds best on meadows with deep, rich soil, and should be sown in a mixture with Nos. 9 and 10, as suggested above. Horses and cattle show a marked partiality for it, and it ranks very high for its nutritive qualities. It is a very hardy perennial, 2 to 3 feet high, flowering in July. One ounce of seed contains 150,000 kernels.

TO-DAY.—While you are reading this just make out a list of such seeds as you desire from this catalogue and mail it to us on your first trip to the post-office. You will feel better to have them early and ready to sow just as soon as soil and weather permits.—**It don't pay to be late.**

For prices see Price List of Grass and Clover Seeds on page 12.

12. Red Top.—*Agrostis vulgaris*.

A well-known and valuable pasture grass; also excellent for hay. It grows almost anywhere, but in a moist, rich soil it reaches its highest state of perfection. Is well adapted for top seeding on marshes or low ground in old meadows, and should be sown together with Tall Fescue, Floating Meadow and Water Spear Grass for this purpose, when the fine Red Top makes a valuable undergrass among these other tall-growing varieties, adding greatly to the bulk and fineness of the hay secured from such meadows, as well as helping to make a firm and close sod. For a pasture, Red Top should be fed close, as cattle do not like it when it grows up to seed. In meadows it should be cut at the right time or it soon becomes hard and woody.

dwarf habit; it is one of our most valuable grasses for

13. Fowl Meadow Grass.—*Poa serotina*.

A native grass found in the eastern half of the Northern States, and highly approved of for permanent pastures and meadows. It prefers low and moist lands and succeeds well in wet meadows, or low places along streams liable to occasional overflow. It is a perennial, 18 to 24 inches high, flowers in July and August.

14. Creeping Bent.—*Agrostis stolonifera*.

This variety is especially valuable as a pasture grass and best adapted for low and moist situations. It starts early and holds out very late in autumn, affording herbage in early spring and late fall, before other grasses have commenced or have stopped growing. It prefers deep, rich and moist soils, being very deep rooted, of quick, successive growth when cropped close, and of permanent pastures. It is a very hardy perennial, 18 to 24 inches high, flowering in June and July. One ounce of the seed contains 280,000 kernels.

15. FANCY RED TOP.

This is the same as No. 17, only the seed is free from chaff and husks, and much higher priced.

16. MEADOW SOFT GRASS.—*Holcus lanatus*.

This variety is also known as Velvet Grass, Yorkshire Fog and Velvet Mesquite Grass. Although not of high feeding value, it is very valuable for low, soft and spongy places, where other grasses don't succeed. It grows equally well on light, dry land and seems to be of especial value for the South. Dr. Phares says: "It has been introduced into Texas and grows much larger than in the Eastern States or England; and it seems to be more valuable and greatly improved here. It grows 2 to 4 feet high in the South." It is very productive; a hardy perennial, 18 to 20 inches high, flowering in June.

17. RHODE ISLAND BENT.—*Agrostis canina*.

For permanent pastures this is very valuable, but it is more desirable for lawn purposes. It will make beautiful, close, fine sod upon quite sterile soil. It is a very hardy perennial, 1 to 2 feet high, flowering in June and July.

18. WOOD MEADOW GRASS.—*Poa nemoralis*.

This grass is invaluable for wood pastures or shaded ground, and should be included in all mixtures for permanent pastures, especially in shady places; it is relished by all kinds of stock, cattle showing a marked partiality for its fine, succulent and very nutritive herbage. It grows on almost any soil, succeeding best in moist, shady places, being remarkable for its quick, successive growth when closely cropped. For lawns overshadowed by trees it is particularly valuable, and it produces a very thick growth and a nice, even sod. It is a hardy perennial, 1½ to 2 feet high, flowering in June. One ounce of the seed contains 150,000 kernels.

19. KENTUCKY BLUE GRASS.—*Poa pratensis*.

A variety also called June Grass, Smooth Stalked Meadow Grass, Green Meadow Grass and Spear Grass. Very valuable and exceedingly popular in some sections of the country as a pasture grass. It is very productive and unusually early in spring, furnishing delicious food throughout the season for all kinds of stock. It is not easily affected by drought or frost, is suited to any variety of soils, succeeding best on a moist, rich meadow. For permanent pastures it is particularly valuable, being of dwarf growth, therefore not so well suited for meadows. It is a hardy perennial, 10 to 15 inches high, flowering in June. One ounce of the seed contains 150,000 kernels.

For prices, see Price List on page 12.

21. Crested Dogstail.*Cynosorus Cristatus.*

For permanent pastures, especially on high land and hard dry soils and hills, this grass is invaluable. It produces an abundance of foliage, is very hardy and but little affected by extreme drought or cold weather. It is tender and nutritious and relished by all kinds of stock. On account of its evergreen foliage and thick and close growing habit it is of particular value in a lawn mixture. It is a hardy perennial; 1-1½ feet high, flowering in June. One ounce of the seed contains 35,000 kernels.

23. Red Fescue.*Festuca Rubra.*

Like No. 21 (Crested Dogstail), No. 22 (Sheeps Fescue), and No. 6 (Hard Fescue), this variety is invaluable for meadows or pastures on dry, hard or sandy soils. They all endure severe droughts. The roots penetrate so deep in the ground that they remain fresh and green when other varieties are apparently dried up. Although adapted for dry upland pastures, on meadows with a deep, rich, sandy loam, it furnishes an average bulk of fine hay of good quality. It is a very hardy perennial, 1 to 2½ feet high, flowering in June. One ounce of the seed contains 32,000 kernels.

24. Rescue Grass.*Bromus unioloides.*

A most valuable and native grass of the South, and highly valued where it is known. If grazed closely or mowed frequently the roots will live several years like a perennial. It is also known as "Schrader's Brome Grass," "Australian Oats," etc. It makes the best growth during the cooler months, but it resists heat and drought to a remarkable degree. Although it will thrive on any kind of land, it will do best on rich and somewhat damp soil, where it grows 3 feet high and more, with a large proportion of leaves, which are tender, sweet and nutritious, and which are renewed very quickly after being eaten down. If used for making hay, it will give a good cutting in February and another in April, and the third crop will make sufficient seed to stock the field for next year or can be used for good pasture. The seed is usually sown at the rate of 20 to 30 lbs. per acre and either by itself or together with other grasses or clovers.

We cannot help asking all of our brother farmers, in the Southern States especially, to give this valuable grass at least a trial this year, for it is only to your advantage.

22. Sheeps Fescue.*Festuca ovina.*

This variety prefers to grow on light, sandy soil and dry uplands or hillsides. It is deep rooted and not affected by extreme drought. Sheep are especially fond of it, and in mixtures for permanent pastures on dry uplands, particularly if used for sheep grazing, it should be included, as it is highly relished by them, being one of the sweetest grasses and very nutritious. On account of its fine foliage and compact growth it is very desirable for lawn purposes. It is a hardy perennial, 1 to 2 feet high, flowering in June and July. One ounce of the seed contains 65,000 kernels.

25. Johnson Grass.*Sorghum halpense.*

For the Southern States this grass is of particular value. Dr. Phares says: "During a long drought in Mississippi, this grass was mown three times, and on the first of October, when from 8 to 12 inches high, the cattle were turned in it and there remained feeding and fattening on its abundant, rich, rapidly growing foliage until the last of December." It is a perennial, the roots penetrate the ground in every direction and each joint may send up a stem; these are 3 to 6 feet high. All kinds of stock are fond of it. It will stand great heat and severe drought, but should be sown alone, on well prepared ground, at the rate of 25 lbs. per acre.

26. Yellow Oat Grass.*Avena flavescens.*

This variety is particularly well adapted for dry pastures or meadows, but should be sown in a mixture with other grasses, adapted for light and dry soils, like Nos. 21, 22, 23, etc. It is very early and greedily eaten by cattle and also makes nice hay, producing a very large aftermath. It is a perennial, 1 to 2 feet high, flowering in June. One ounce of the seed contains 90,000.

27. Sweet Vernal.*Anthoxantum odoratum.*

Although this variety does not rank as high as some others for nutritive qualities, yet it is very valuable on account of its delicious perfumes, and when included in hay, its aroma is imparted to the other grasses, enhancing the value of the hay and making it relished by the stock. The odor is more distinguishable when the grass is drying or dried. It is a perennial, 1 to 1½ feet high, flowering in May and June. One ounce of the seed contains 62,000 kernels.

Our Clover-grass Mixtures for permanent meadows and pastures for all kinds of soils are superior to any thing usually offered. Thousands of acres are sown every year with them, and hundreds of our best German Farmers are reaping magnificent hay crops from their meadows and testify to the superiority of our Clover-grass Mixtures for all purposes. You will do the same if you order from the Farmer Seed Co. Select the mixture best suited for your soil and climate, on page 15, and send in your order.

For prices see Price List of Grass and Clover Seeds on page 12.

28. Our Minnesota Timothy.

So well known that it hardly needs any description. Our Timothy, which we grow here in Minnesota, in the rich prairie soil and bottom lands, for seed only, will surprise you by its strong growth, hardness and heavy cropping properties. The demand for this, our Minnesota-grown, Timothy has always been greater than we could supply, but this year we have quite a nice stock of fine seed, and think we can supply all demands.

PRICES on both Timothy and Clover vary a good deal and are at the time of writing this about \$3.25 per bushel for Timothy and \$6.95 for Clover. But to have everything satisfactory, we will quote lowest prices for either, by return mail, in any quantity. Please write us how much you want and get our bottom prices.

MINNESOTA GROWN TIMOTHY

But bear in mind that we offer only choice Minnesota-grown fresh seed, which is worth \$1.00 and more per bushel than common seed obtained from dealers. Our price may, therefore, be a little higher, but—?? (Don't you think fresh and pure seed grown by us here in Minnesota is worth it?)

29. RED OR JUNE CLOVER.

Every farmer is familiar with it, and a field of Clover knee-high means fat cattle, swine and buncy sheep. Clover is the foundation of all farming, and it pays to buy Clover seed at even \$10.00 a bushel and sow it at the rate of 6 to 8 lbs. per acre in the spring among wheat, rye, oats, barley, flax, etc., for no other purpose but as a fertilizer. Good clover sod plowed under gives the best and biggest yields of corn, potatoes, oats, wheat, etc.

Our Minnesota-grown Red Clover, which we have been supplying to our customers for several years from Chicago, is well known for its hardness, strong and healthy growth, stooling qualities and large yield of leaves. It is well worth 25 per cent more than common seed offered for sale in stores by commission seedsmen. Our customers realize its great value, and we have never been able to supply the demand, but this year have a nice stock of fine seed and think we can supply all demands.

For prices, see above and price list on page 12.

ALSYKE CLOVER.

For several years we have urged our friends to sow this variety of clover, as it is not so well known yet as it deserves to be. The advantages Alsike Clover has over Red Clover and other varieties are many, the most prominent are its **HARDINESS** and **TRUE PERENNIAL** character. It is hardy here in our cold northern climate, and no winter will winter-kill it. It does not heave out of the ground in spring with the frost, and can therefore be sown on damp or moist ground with good results. One seeding will last for years; it is always sure to come up every spring like a true perennial. Another great advantage of the Alsike is that it will adapt itself to a variety of soils, growing on the edge of a stream or in a swamp and on low ground, and yet flourish on the most dry and stubborn upland soils. It is capable of resisting the extremes of drought and wet alike. As a fertilizer it is equal to Red Clover.

It is well liked by all stock, either green in pasture or cured for hay. Horses, cows and sheep prefer it to Red Clover. The hay is free from fuzz or dust and will not cause horses to cough. It makes finer and better hay, because the stalks are not so thick and woody as those of Red Clover.

ALSYKE CLOVER.

CULTURE: The seed being very fine, 6 to 8 lbs. per acre is only needed, and it can be sown either by itself or in either winter or spring grain. It can be either cut for hay the same fall when sown with grain (as some of our customers have done even the past very dry summer) or pastured a little. If sown by itself, a full crop of hay and fall pasture can be had same year. After that, if wanted for hay, it is mowed twice a year, and fall pasture can be had besides. It yields abundantly and is well adapted for either permanent pastures or meadows and also on lands liable to wash. The heads are round and flesh colored; it grows from 15 to 24 inches high.

Now would you not like a clover that will grow on all kinds of soil, either wet or dry, withstand drought and dry weather, and will not winter-kill even in the hardest winters; does not need to be resown every year and can always be depended upon? If you do, try our Minnesota grown Alsike Clover, but be careful and get our true northern-grown seed or you may be disappointed with seed commonly sold by other dealers; we sell it for hardly any more than cheap commission seed is sold for, although our northern-grown Alsike is worth \$3.00 more per bushel. It will be your best investment these hard times if you order a bushel or so of our Alsike this spring.

Price: Per lb., postpaid, by mail, 30c.; by express or freight, lb., 20c.; pk., \$2.50; ½ bu., \$4.80; 1 bu. (60 lbs.), \$9.40.

MAMMOTH RED CLOVER.

Well known in many parts of the country and highly valued for its enormous yield and for reclaiming exhausted land. For hog pasture and as a hog fattener it has no equal and is far superior to the common Red or June Clover. Where permanent hog pastures are wanted our Minnesota-grown Mammoth Red Clover has given the best results, while for quick results in a hog pasture our Crimson Clover has no equal.

Write for prices on our Mammoth Clover, which we quote by return mail.

31. WHITE CLOVER.—*Trifolium repens*.

Of particular value in mixtures for permanent pastures and lawns, and will grow in almost any kind of soil, succeeding best in moist ground, while on light and dry sand it will appear much dwarfed; being very hardy and of creeping habit, will also prevent the ground from being washed by heavy rains.

33. BOKHARA OR SWEET CLOVER.—*Melilotus alba*.

This is of little value except for a bee pasture; it is a tall shrubby plant with many white flowers of delicious fragrance, on which bees delight to feed. It will grow on poor soil and can there be sown and plowed under as a fertilizer.

34. JAPAN CLOVER.—*Lespedeza striata*.

Valuable in the South to grow on poor, worn-out fields as a fertilizer or for sheep pasture, being very nutritious. It withstands extreme drought, is a perennial of creeping habit much like White Clover. It is not hardy north of Virginia.

35. YELLOW TREFOIL.—*Medicago lupulina*.

On very light, dry or poor ground this variety is valuable for a sheep pasture, and can be sown alone or with other grasses. It grows rapidly and is very productive.

CRIMSON CLOVER.

Trifolium incarnatum.

Also called Scarlet, Incarnat or German Mammoth Clover.

Probably no other plant has attracted so much attention the past few years as Crimson Clover. Although for more than 10 years it has been tested and grown in nearly all parts of the country in larger or smaller fields, it is only within the last 2 or 3 years that its value has become known all over the country. It is the only clover which yields a full and heavy crop the first year. It is remarkable for its quick growth. Sown in March or April it is ready to cut in June or July, yielding a heavy crop of fine hay, which is well liked by all stock, and will then grow up again from the roots in a short time and furnish good pasture for the rest of the season. It is excellent to withstand long and severe droughts. Equal to the Red Clover as a fertilizer on account of its heavy foliage and strong roots.

Scarlet Clover is grown very extensively in some Eastern states, and the following extract from a bulletin on "Scarlet Clover," published by the Delaware College Agricultural Experiment Station, shows how it is valued there: "Scarlet Clover as a Weed Eradicator. It is but reasonable to suppose that the Scarlet Clover has this power; growing as it does even earlier in spring than the sheep sorrel and similar weeds, these are overpowered when their time comes to vegetate."

For Binding Loose Soils and Protecting Hillides from Losses of Soil during Heavy Storms.—The *Country Gentleman*, for January 22, 1891, reports that the Rev. J. S. Willis, of Milford, expressed himself as follows at a meeting of a farmers' institute: "I commenced to use Scarlet Clover in 1880 and now have from 70 to 80 acres which I shall turn under as green manure. My soil is a sandy loam, or, as some people think, sand without loam. Pasturing killed the grass. In the dry summer my fields were dusty and I was in danger of losing what sand I had. But now these fields are covered with a green carpet of Scarlet Clover, and they have yielded 50 bushels of corn per acre."

This statement also proves the value of Scarlet Clover for reclaiming and enriching poor and worn-out lands, and its value as green manure.

CRIMSON OR SCARLET CLOVER.

Owing to its very quick growth we have found Scarlet Clover very valuable when we were short of early pasture or where the new seedlings the year before were killed by long droughts and we would consequently be short of hay and pasture. Here the Crimson Clover is invaluable, especially when sown together with the quick-growing Italian Rye Grass, and we can but advise our brother farmers who will be short of both hay and pasture on account of the long, dry summer last year to sow a few acres of Crimson Clover and Italian Rye Grass in early spring, thereby making up for the shortage. We have prepared a special mixture for this purpose (see C. No. 7, on page 16) and this has for the past few years given entire satisfaction, being tried thoroughly everywhere; we feel safe, therefore, in recommending it. A few acres sown in early spring will certainly be of great benefit. Also for a hog pasture Scarlet Clover is very valuable. (See our Clover Grass Mixture, C. No. 5, page 15.)

CULTURE: From 10 to 12 lbs. of seed are sown per acre; when wanted for hay it will be ready to cut in about 8 weeks from the time of sowing, and after mowing it is ready again to pasture in a few weeks, and from then on until late in fall. Its average height is about 2 feet, covering the ground completely with a heavy and thick growth of foliage. It stools heavy and many heads will come from one kernel, as shown in our illustration, which is taken from an average plant as it appears in the field.

Our brother farmers will see how valuable this Scarlet Clover is, and you will want to try a few acres this spring and are looking for a place to get your seed from. The best authorities join us in saying that northern seed of the Scarlet Clover (like all other kinds of seed) is best, and we have a fine stock of new crop seed which is sure to give satisfaction. We can also sell you our choice seed at lower prices than common southern grown is offered, and should like to fill your orders at the following low prices as long as our large stock will last: Per lb., by mail, postpaid, 22c.; by express or freight, lb., 12c.; pk., \$1.35; $\frac{1}{2}$ bu., \$2.60; bu., \$5.10; bag of 2 $\frac{1}{2}$ bu., \$12.50; 100 lbs., \$3.40.

When common Red Clover is so scarce and high priced as it is now, and will be this spring, it is certainly profitable to give the Crimson Clover a trial at least; not only that it is much cheaper but equal to it as a fertilizer and soil enricher, is of much quicker growth and will give a full crop and heavier yield the first summer from seed sown in spring.

LUCERNE

Plant and roots, which go down into the ground 6 to 12 feet.

ALFALFA OR LUCERNE.—*Medicago sativa*.

Having long been familiar with Alfalfa or Lucerne, and its great value as a fertilizer and forage plant, capable of standing long and protracted droughts, we have often wondered why it is not more cultivated, and thought probably that it is not known well enough. Now, the past summer, the driest one ever known in many parts of the country, has shown how well Lucerne will stand dry weather and not be affected by it. The reason for this is that it is very deep-rooted, the roots going down into the ground 6 to 12 feet, and in mellow, sandy soil, even deeper, consequently they will feed on the fertilizers and moisture which other plants cannot reach. It will grow and yield abundantly in all parts of the country, and on poor, dry and light sandy land, where no other grasses can be grown. In the sunny South it thrives, and does equally well with us here in the cold North. For this reason every farmer should arrange to sow at least one acre now, this spring, so as to be well prepared when another drought comes like last summer. When once sown a field will stand for 15 to 25 years, and can be cut from 3 to 5 times every year, thereby furnishing such an enormous yield of sweet and nutritious forage as can be had from no other plant; and it is well liked and highly relished by all stock either when green or cured for hay.

CULTURE: It is best sown in the spring (April or May), either by itself or with grain, at the rate of 10 to 12 lbs. per acre. It will make a fair growth the first year, and many of our customers have cut it for hay in the fall, after seeding in the spring with grain. The year following it will be ready to cut early, and two or three times during the season, and every year thereafter for 15 to 25 years. To succeed best, select a piece of mellow, well-drained or rolling land, where water readily passes away, for Lucerne will not flourish on land where water stands a short distance below the surface, nor in heavy, sticky clays.

Now, would you not like a piece of land on your farm where you can cut three or more crops of either green forage or hay from in even the driest of summers, something that will stand drought and dry weather? Then why not sow one or more acres with Lucerne this spring? You may have land just right for it, and will thank us that we advised you to do so.

PRICE: We have put this so low that all can afford to try it. Lb., by mail, postpaid, 30c.; by express or freight, 20c.; 12 lbs. (for one acre), \$1.65; pk., \$2.00; bu., \$7.30.

See, also, our Special Clover Grass Mixture, C. No. 9. page 16.

SAND LUCERNE.—*Medicago media*.

A variety of Lucerne especially adapted for very dry, sandy land, where it will yield heavy crops. Is very long-lived, and will grow in all climates. Lb., postpaid, by mail, 30c.; by express or freight, lb., 22c.; pk., \$2.55; bu., \$10.00.

SAINFOIN OR ESPARCETTE CLOVER.

Onobrichis sativa.

Another very excellent, but unfortunately little known, fodder plant for light dry, sandy, gravelly limestone or chalky soils. It flourishes during long droughts, for, like Lucerne, Esparcette is very deep-rooted, going down 15 to 20 feet into the ground. It succeeds where many other grasses will not. It is cut twice every year, and mostly used for hay; is very nutritious, and, when fed to milch cows, improves the quality of the milk. The quality of the fodder more than compensates for the deficiency in quantity. The seeds are large, and are best sown broadcast in spring, under a light (about half crop) seeding of oats or barley, at the rate of 30 to 40 lbs. per acre, and covered the same depth as barley. It will thrive and crop from 8 to 12 years, according to the nature of the soil.

Price: Lb., postpaid, by mail, 25c.; by express or freight, lb., 15c.; 30 lbs. (for one acre), \$3.30; 50 lbs., \$5.25; 100 lbs., \$10.00.

SAINFOIN OR
ESPARCETTE CLOVER.

Price List of Grass and Clover Seeds for Spring of 1895.

Owing to the very dry summer, the crops of many varieties are very short; prices, consequently, much higher. This is especially so on Orchard Grass, Red Top, Blue Grass, Timothy and Red Clover.

For larger quantities we shall be glad to quote lowest prices for the best quality of seeds obtainable. The best is always the cheapest, and we aim to have only the best.

WEIGHT OF GRASS SEEDS.—Grass seeds and clovers are sold mostly by the pound and 100 pounds, but when grass seeds are ordered in bushel lots we send 14 pounds per bushel (except where noted in our price list). Clover weighs 60 pounds and Timothy 45 pounds per bushel.

For accurate and true description of these grass seeds and clovers, read pages 2 to 11.

The numbers are the same as those on pages 2 to 11. Any variety can therefore be easily found.		Per 100 lbs.	Per Bushel	Per Lb. Cts.	Per Lb. Postpaid Cts.	50w, if alone, per Acre. Lbs.
1.	Meadow Fescue (<i>Festuca pratensis</i>).....	\$11.40	\$1.60	.13	.25	25-28
2.	Meadow Foxtail (<i>Alopecurus pratensis</i>).....	23.00	3.25	.25	.35	15-20
3.	Tall Meadow Oat Grass (<i>Avena elatior</i>).....	13.60	2.00	.20	.30	25-28
4.	Tall Fescue (<i>Festuca elatior</i>).....	16.75	2.35	.20	.30	25-28
5.	ORCHARD GRASS (<i>Dactylis glomerata</i>).....	15.35	2.15	.20	.30	18-22
6.	Hard Fescue (<i>Festuca duriuscula</i>).....	14.50	2.05	.20	.30	18-22
7.	Italian Rye Grass (<i>Lolium Italicum</i>).....	10.25	1.50	.15	.25	20-24
8.	ENGLISH RYE GRASS (<i>Lolium perenne</i>).....	8.75	.90	.12	.20	20-24
9.	Water Spear Grass (<i>Glyceria aquatica</i>).....	22.00	3.25	.25	.35	25-28
10.	Floating Meadow Grass (<i>Glyceria fluitans</i>).....	19.00	2.80	.25	.35	25-28
11.	Rough Stalked Meadow (<i>Poa trivialis</i>).....	22.25	3.15	.25	.35	15-18
12.	RED TOP (<i>Agrostis vulgaris</i>).....	8.15	1.15	.10	.20	18-22
13.	Fowl Meadow (<i>Poa serotina</i>).....	16.00	2.40	.20	.30	18-22
14.	Creeping Bent (<i>Agrostis stolonifera</i>).....	15.00	2.15	.20	.35	15-18
15.	Fancy Red Top.....	16.25	2.30	.20	.30	8-10
16.	Meadow Soft Grass (<i>Holcus lanatus</i>).....	18.75	2.70	.25	.35	12-15
17.	Rhode Island Bent (<i>Agrostis canina</i>).....	17.50	2.50	.25	.35	15-20
18.	Wood Meadow Grass (<i>Poa nemoralis</i>).....	23.00	3.25	.30	.40	15-18
19.	{ FANCY KENTUCKY BLUE GRASS.....	12.50	1.80	.15	.25	15-18
	{ Common or "B Grade" Blue Grass.....	9.50	1.40	.12	.20	18-22
21.	Crested Dogtail (<i>Cynosorus cristatus</i>).....	24.00	3.50	.30	.40	18-22
22.	Sheep's Fescue (<i>Festuca ovina</i>).....	13.00	1.90	.20	.30	18-22
23.	Red Fescue (<i>Festuca rubra</i>).....	19.00	2.70	.25	.35	18-22
24.	RESCUE GRASS.....	.....	3.18	.28	.36	20-30
25.	Johnson Grass (<i>Sorghum Halpense</i>), weight 25 lbs. per bushel.....	13.00	3.50	.20	.30	25
26.	Yellow Oat Grass (<i>Avena flavescens</i>).....	34.00	5.00	.40	.50	20-25
27.	Sweet Vernal (<i>Anthoxanthum odoratum</i>).....	15.00	2.25	.25	.35	15-20
28.	{ TIMOTHY, our choice Minnesota-grown.....	.....	.....	.10	.18	12-20
	{ (See page 8, and write for prices on quantities.)	.....	.....	.....	.....	.....
CLOVERS (Weight 60 lbs. per bushel except where noted)—						
RED (Common), or JUNE CLOVER, our choice Minnesota-grown. See page 8, and write for prices on quantities.....				.15	.25	8-15
Alsike Clover. (See page 9.).....				15.65	9.40	7-12
Mammoth Red Clover. (See page 9.).....				.....	.15	8-15
White Clover. (Per pk., \$3.90.).....				.....	14.50	6-8
Bokhara or Sweet Clover (<i>Melilotus alba</i>).....				20.00	12.00	10
Japan Clover (<i>Lespedeza striata</i>). (10 lbs., \$2.90.)				.....	.35	15
Yellow Trefoil (<i>Medicago lupulina</i>).....				.....	10.00	15
CRIMSON CLOVER. A grand new Clover. (See page 10.) Should be sown more this year, as it costs less than Red Clover.....				8.40	5.10	10-12
ALFALFA OR LUCERNE (<i>Medicago sativa</i>).....				12.15	7.30	10-12
Sand Lucerne (<i>Medicago media</i>).....				.....	10.00	10-12
Sainfoin or Esparrlette (<i>Onobrychis sativa</i>). Weight 25 lbs. per bushel. (See page 11.).....				10.00	2.75	30

We furnish new grain bags for clover and timothy at only 16c. each for large or 2½ bushel bags, and 8c. each for 1 bushel bags, which have to be added to every order. For grass seeds in bushel quantities, or up to 50 lbs., please add 10c. for each bag. We give good, strong bags with orders for grass seeds from 50 lbs. up.

We supply half bushels at bushel price (except where noted). Write us for special price on large quantities.

PERMANENT PASTURES AND MEADOWS.

How can I obtain a permanent pasture or a permanent meadow; something that will stand for years and not be affected by drought, or freeze and heave out in winter; something we can cut twice in one year or mow once and have good fall pasture besides; or something that will give a good pasture all the year around, from early spring until late in the fall, and not be easily affected by drought? For Grass is King! and more grass we must have!

Such are the questions repeatedly asked us in the thousands of letters we annually receive from our brother farmers from all parts of this great country, and realizing the great need of better pastures and meadows and better grasses, we are determined to fill this want. For several years we have worked hard to introduce better grasses and induce our brother farmers to give up the custom of sowing but one or two kinds of grass, because one kind of grass will not cover the ground sufficiently or yield a heavy and full sward of hay; besides, the varieties sown were Clover and Timothy and these are not permanent, being also easily affected by drought or frost, thereby making it necessary to resow every year or two, only occasionally securing a little longer stand with exceptional favorable weather conditions; but this method is very expensive, having to prepare and fit the ground so often and seed anew.

On the other hand, we have several varieties of natural grasses sown together, which are selected so as to be adapted for the soil and climate as well as for the purpose sought to attain. These will cover the ground very closely and make two spears of grass grow where formerly but one grew; besides, they will stand various climatic and soil conditions better, will last longer or be permanent, yield heavier or double the quantity of hay than is secured from ordinary fields or even fields sown with Timothy and Clover. These are facts well established by careful experiments. (We also here refer to the letters from our customers who have sown our Clover-Grass Mixtures.)

The object of sowing several varieties of Grass Seeds or Clovers together in a mixture is manifold; for instance, to secure a more numerous or thicker stand of plants, for some varieties may like and thrive on your particular piece of land better than others, and these will then have a chance to do their very best; then, again, some varieties will be bright, fresh and succulent while others are dingy, and others be of early, some of late growth, and for pasturage this is a very important consideration. When wanted for mowing the varieties must be selected so as to ripen nearly at the same time and be of good, tall growth, while the low or dwarf-growing varieties are better adapted for pasturing. Another good reason is that soils vary so much that it is best in seeding down a pasturage or for mowing to diversify the risks rather than, as it were, to carry all the eggs in one basket. Therefore, it pays best for permanent or temporary pastures or meadows to use a carefully prepared mixture of grasses and clovers. Timothy and, in many parts, Timothy and Clover, are the only grasses sown. While timothy is a valuable grass and is included in nearly all mixtures for permanent pastures or meadows, there are other kinds so much better, will last longer and yield a heavier crop, and should the small quantity of Timothy which is sown with the mixture, or is in it, fail, then these grasses will take its place. It is, therefore, surprising why so many farmers will stick to the old way of sowing only Timothy or Timothy and Clover, when seeding down for pasturage or a hay field, without even giving one or more of the other kinds a trial, especially when they cost about the same or hardly any more. This item, the cost, has probably kept so many from using the Clover-Grass Mixtures, but that should not be so any more this year when it costs about the same per acre whether Timothy and Clover or our Clover-Grass Mixtures are sown. It costs from \$1.00 to \$1.25 for about 8 to 10 pounds of Clover and 50c. to 75c. for the necessary Timothy to sow one acre, or about \$2.00, while it costs but very little more to sow with our Clover-Grass Mixture, and in large quantities even less. Would it not be worth while then to try the best when such good results have been secured in even such an unfavorable season as the one just passed?

The selection and preparation of Clover-Grass Mixtures has been one of our great specialties for years, and not only have we given much thought and study to this subject but carry on many and extensive experiments on our own fields as well as in different parts of the country, whereby we are enabled to suit the requirements of our country better. It is to be regretted that so many city seedsmen will undertake to catalogue or recommend mixtures for pastures or meadows of which they know but very little, being accustomed to describe and sell cabbage and such other garden seeds with which they are familiar, but know nothing about grass or clover seeds and the selection of Clover-Grass Mixtures and less about actual farming. The results in such cases are not only loss to the farmer who acts upon their advice but they also have a tendency to keep others back from using a good thing. To be successful, buy only

from the growers, men who have actual experience, are familiar with the subject and know what is best adapted for different kinds of soil. City seedsmen do not care about the results so long as they can only sell for big prices. We have for several years, in the neighborhood of Chicago, experimented with different grasses and Clover-Grass Mixtures, and a partial report of these experiments appeared in the *Orange Judd Farmer* last year (Vol. 14, No. 23), and having a few copies of this yet we will send a copy to all interested, and here in our new home we continue these experiments and field trials on a much larger scale.

In our Clover-Grass Mixtures we have selected the grasses to be sown together that are adapted to the soil and which, by reason of their different growth and root formation, promise to fill the purpose sought to be attained. For a meadow we select the taller grasses and such as will ripen nearly at the same time, making a strong aftergrowth besides; while for a pasture the lower or dwarf-growing grasses are adapted, which, by reason of their growth and root formation, form a very close, thick turf, are of quick, successive growth when closely grazed, as well as being early and late, thereby furnishing food for the cattle from early spring until late in the fall, are adapted to the soil and able to withstand the usual drought in the summer.

When and how to sow Grass Seed.—We have always advocated to sow grass seed by itself without a so-called nurse crop, having had better success in our own experiments when grass seeds were sown that way, and our customers report better results. Many farmers sow grass seeds in spring with grain to save labor and, as they suppose, to protect the young plants. It might be economy of labor to put in two crops at once, but the young plants are in no way protected by the grain; on the contrary, a good deal of grass seed is lost every year and many a new-sown field burned out, for the grain is harvested at the hottest time of the year, and the young grass plants, being used to the shade, are left without any protection and burned up, leaf and root, by the scorching sun. But when the grass seed is sown by itself the young plants are hardened and more able to withstand the hot and dry season.

Professor Henry, Director of the *Wisconsin Agricultural Experiment Station*, says, about sowing the grass seed with a nurse crop, as follows: "There is probably no part of general farming less understood than the use of 'nurse crops' for grasses and clovers. Farmers ask, when recommended the sowing of clover and grass seeds by themselves, if the young plants will not burn up with the sun unless some grain, like oats, barley, wheat or rye, is sown for protection. Let us look into this a little. Where one of these grains is sown together with grass and clover, one or both, the roots from the grain plant soon reach deep into the soil considerably below the roots of the young grass or clover. If there is plenty of moisture both grow together nicely. If there is a lack the grain roots, being the deepest, get the moisture, taking it from the grass and clover roots, and the latter plants die if the supply is cut off for any length of time.

"The truth of the matter is, these so-called 'nurse crops' are a great hindrance to the grasses and clovers, and only when there is moisture for both do both succeed. We have never failed yet in getting a good stand of clovers and grasses when we have sown them alone in spring, while frequently both Clover and Timothy have failed to give a good 'catch' when sown with grain, because the young plants died out in hot, dry weather.

"In sowing grass seeds by themselves, sometimes weeds come up, drawing out moisture and shading the young plants. To check these run a mower over the field, setting the cutter bar high. The grass plants will soon gain a victory over the weeds with this treatment."

Some say we do not like to lose a crop from our land, but where the right kind of grasses are selected, as in our Clover-Grass Mixtures, they will give a full crop of hay the first year, while Clover and Timothy will not do that, and the yield from our Clover-Grass Mixtures will thereafter increase year after year. Thereby we do not lose a crop from our land. Yes, in favorable seasons our customers even harvested a crop of hay or had good fall pasturage the same year from our Clover-Grass Mixtures, even when they were sown with the grain in the spring (see the letters on another page), and we had similar results in our own experiments.

Combination of Grasses for Mowing and Late Pasturing.—Dairy farmers particularly desire to take a crop of hay off the meadow and have the aftergrowth for pasture. This can be successfully done where the natural grasses are carefully selected with this object in view. Such a mixture has to be composed of tall, quick-growing grasses for mowing, after which the dwarf-growing varieties will cover the ground and furnish grazing until late in the fall. We devote especial attention to this.

The Quantity to be Sown per Acre.—We have obtained very good results with the quantities sown per acre as recommended by our mixtures on the next following pages, and our many patrons have been equally successful, so there appears to be no need of sowing double the quantity, as sometimes recommended.

A.—GRASS MIXTURES FOR PERMANENT MEADOWS.

No. 1. For dry and high ground, light soils :

Red Fescue	}	PER ACRE. 20 lbs. @ 11c \$ 2 20
Crested Dogtail		
Orchard Grass		
English Rye Grass		
Sweet Vernal		
Red Clover		50 lbs. \$ 5 25
Lucerne		100 lbs. 10 00

No. 2. For dry and high ground, heavy or strong soils.

Tall Meadow Oat	}	PER ACRE. 20 lbs. @ 11c \$ 2 20
Orchard Grass		
English Rye Grass		
Meadow Fescue		
Red Top Grass		
Sweet Vernal		50 lbs. \$ 5 25
Timothy		100 lbs. 10 00
Red Clover		
Alsike Clover		

No. 3. For moist ground and rich soils.

Meadow Foxtail	}	PER ACRE. 18 lbs. @ 12½c \$ 2 25
Meadow Fescue		
Tall Meadow Oat		
Italian Rye Grass		
Timothy		
Sweet Vernal		50 lbs. \$ 6 00
Alsike Clover		100 lbs. 11 50

No. 4. For moist ground, that is over-flowered occasionally :

Tall Fescue	}	PER ACRE. 16 lbs. @ 12½c \$ 2 00
Meadow Fescue		
Red Top Grass		
Meadow Foxtail		
Timothy		
Alsike Clover		50 lbs. \$ 6 00
		100 lbs. 11 50

No. 5. For top seeding on marshes and swamps, occasionally overflowed, the following mixture is especially adapted :

Water Spear Grass	}	PER ACRE. 10 lbs. @ 16c \$ 1 60
Floating Meadow Grass		
Red Top Grass		
Tall Fescue Grass		
Meadow Foxtail		
		50 lbs. \$ 7 75
		100 lbs. 15 00

B.—MIXTURES FOR PERMANENT PASTURES.

No. 1. For high and dry ground, light soils :

Hard Fescue	}	PER ACRE. 22 lbs. @ 11c \$ 2 42
Red Fescue		
Red Top Grass		
Orchard Grass		
English Rye Grass		
Crested Dogtail		50 lbs. \$ 5 25
Yellow Oat Grass		100 lbs. 10 00
Lucerne		
Red Clover		
White Clover		

No. 2. For high and dry ground, heavy or clay soils :

Orchard Grass	}	PER ACRE. 22 lbs. @ 11c \$ 2 42
English Rye Grass		
Tall Meadow Oat		
Blue Grass		
Italian Rye Grass		
Timothy		50 lbs. \$ 5 25
Red Fescue		100 lbs. 10 00
Alsike Clover		
Red Clover		
White Clover		

No. 3. For moist ground and very rich soils :

Meadow Foxtail	}	PER ACRE. 20 lbs. @ 12c \$ 2 40
Blue Grass		
Fowl Meadow		
Creeping Bent Grass		
Orchard Grass		
English Rye Grass		50 lbs. \$ 5 75
Italian Rye Grass		100 lbs. 11 00
Timothy		
Red Top Grass		
Red Clover		
Alsike Clover		

No. 4. For top-seeding to improve a Pasture on low rich ground or marshes :

Fowl Meadow	}	PER ACRE. 10 lbs. @ 15c \$ 1 50
Creeping Bent		
Red Top Grass		
Tall Fescue		
Alsike Clover		
		50 lbs. \$ 7 25
		100 lbs. 14 00

C.—SELECTED MIXTURES FOR PARTICULAR PURPOSES.

No. 1. Specially selected and adapted for good or rich Prairie soil, where a heavy sward of hay is desired first and the aftergrowth for pasturing. It can be mowed early for hay and the quick successive aftergrowth will then furnish good pasturage until late in the fall.

Tall Meadow Oat	}	PER ACRE. 20 lbs. @ 12½c \$ 2 50
Orchard Grass		
Meadow Foxtail		
English Rye Grass		
Italian Rye Grass		
Timothy		50 lbs. \$ 6 00
Meadow Fescue		100 lbs. 11 75
Rough Stalked Meadow		
Fowl Meadow		
Blue Grass		
Red Top Grass		
Sweet Vernal		
Red Clover		
Alsike Clover		

No. 2. Specially selected for wood pastures, also adapted for orchards and shady places.

Wood Meadow Grass	}	For top-seeding PER ACRE. 10 lbs. @ 12½c \$ 1 25
Orchard Grass		
Blue Grass		
Tall Meadow Oat		
Crested Dogtail		
Sweet Vernal		50 lbs. \$ 6 00
White Clover		100 lbs. 11 75

No. 3. Specially selected for sheep pasture on light, sandy soils or dry upland and hillsides.

Sheeps Fescue	}	PER ACRE. 22 lbs. @ 14c \$ 3 08
Hard Fescue		
Crested Dogtail		
Sweet Vernal		
White Clover		
		50 lbs. \$ 6 75
		100 lbs. 13 00

No. 4. Specially selected for a permanent hog pasture on good rich soils :

Orchard Grass	}	PER ACRE. 15 lbs. @ 13c \$ 1 95
Rough Stalked Meadow		
Grass		
Timothy		
Mammoth Clover		
Alsike Clover		50 lbs. \$ 6 25
White Clover		100 lbs. 12 00

No. 5. We prepared this mixture for some of our friends, and it is particularly adapted for a hog pasture where a quick growth and full use of it is desired the first year. When sown early in spring, the luxuriant growth will furnish rich and succulent food through the summer. Not adapted for a permanent pasture, like No. 4.

Crimson Clover	}	PER ACRE. 12 lbs. @ 15c \$ 1 80
Italian Rye Grass		
Mammoth Clover		
		50 lbs. \$ 7 00
		100 lbs. 13 50

No. 6. For light, sandy and gravelly soils :

Crested Dogtail
Hard Fescue
Sheep's Fescue
Red Top Grass
White Clover

PER ACRE.
20 lbs. @ 15c. \$3 00
50 lbs. \$7 00

No. 7. We prepared this mixture to be used as a catch-crop and for alternate husbandry. Sowed in the spring (March or April), a full crop of hay can and has been cut in July, and the aftergrowth used for pasture until late in the fall, which cannot be had by sowing Red Clover alone. We urge our brother farmers to sow a few acres of this in the spring, so as to secure a full hay crop this year, because many fields have suffered from the long drought last summer so much that the hay crop will be reduced considerable, but by sowing a few acres of this Clover-Grass Mixture the shortage can be made up.

Crimson Clover
Italian Rye Grass
Tall Meadow Oat Grass

PER ACRE.
15 lbs. @ 13c. \$1 95
50 lbs. \$ 6 25
100 lbs. 12 00
500 lbs. 50 00

No. 8. Special Renovating Clover-Grass Mixture. Adapted for sowing in fields where the clover or grass has mostly been winter-killed or otherwise injured, and where bare spots are in the spring. Sow the last of April or first of May or earlier. It will then be ready to cut with the other grass and clover, and a full crop from such field with bare spots can thereby be secured. To secure best results, the bare spots and places should be harrowed over first or the surface mellowed before the seed is sown.

Crimson Clover
Italian Rye Grass
Tall Meadow Oat Grass
Timothy

Quantity to be sown per acre must be according to the stand of grass or clover. Usually 5 to 10 lbs. per acre are sufficient.

Per lb. \$0 12½
25 lbs. 3 00
50 lbs. 5 75
100 lbs. 11 00

No. 9. This is our Special Alfalfa or Lucerne Clover-Grass Mixture, and consists mainly of Alfalfa and such varieties of grasses as will stand drought and flourish on poor soils and give large yields in the driest summers, after once being established. To be prepared for another dry summer like the one just passed, one or more acres should be sown with this. (See page 11.) The quantity required per acre of this, our Lucerne Clover-Grass Mixture, is 15 lbs. @ 14c. = \$2.10; 50 lbs., \$6.75; 100 lbs., \$13.00.

You can order these Clover-Grass Mixtures by the number from either A, B or C.

The greatest care is exercised in selecting and preparing these mixtures, and only such varieties are used as are adapted to the soil and suited for the purpose sought to be attained. Where they don't cover the ground, write us, giving a description of the soil and climate and for what purpose they are to be sown. We are prepared to select and make up special mixtures of grasses for all particular purposes.

We make no charge for bags in quantities from 50 lbs. up, unless ordered in separate varieties, then add 10c. for each bag required. In lots less than 50 lbs. add 10c. for the bag.

Clover-Grass Mixtures by Weight or in Bushel Lots.—Frequently someone will inquire about the price of our Clover-Grass Mixtures in bushel lots, and we wish to state here that where we have given the quantity required for sowing one acre, and the price, it is not necessary to order in bushel lots, but order from these the quantity required for one-half acre, one acre or fifty acres. The bushel price quoted by some dealers, which is based on 14 lbs. to the bushel, is much too high.

OUR TRIAL CLOVER-GRASS MIXTURE.

We know that there are many thousands of farmers who have never heard of our Clover-Grass Mixtures, but would like to try one or more acres this spring. For the benefit of these we have selected this Clover-Grass Mixture. It is composed of about 15 different varieties of grasses and clovers, and can be sown on almost any kind of soil where oats, corn, rye or wheat will grow, and can be used for either meadow or pasture. This will give everyone an opportunity to test our Clover-Grass Mixtures at a small cost.

About 22 to 25 lbs. should be sown per acre, according to the land; on poor soil the greater quantity. We sell this Trial Clover-Grass Mixture at \$1.65 per bu. of 14 lbs.; \$2.75 for 25 lbs.; 50 lbs. for \$5.00; 100 lbs., \$9.65.

See next page for our special offer of a Seeder with our Clover-Grass Mixtures.

OUR "GARDEN CITY" LAWN GRASS SEED.

We have taken unusual pains with our Lawn Grass Mixture, selecting nothing but the most desirable grasses, that will give a luxuriant growth in spring, summer and autumn, not being affected by drought very easily, and always presenting the same green, velvety appearance. We are in a position and better able to do this than any other seedsmen, owing to the fact that we make grass seeds our specialty, handling large quantities of native and imported fancy grasses.

Price of "Garden City" Lawn Grass Seed.—By mail, prepaid, 25c. per qt.; 4 qts., \$1.00. By express or freight, not prepaid, per qt., 15c.; per pk., \$1.00; per bu. of 14 lbs., \$2.75; 3 bu., \$7.50.

One qt. is sufficient to sow a plot 15x20 feet (300 sq. feet); 3 to 4 bu. (14 lbs. per bu.) should be sown per acre.

SPECIAL OFFER.

We have decided to send Seeders with larger orders for our Clover-Grass Mixtures, for it is very important that the seed should be sown very even, and this can be done best with the machines we offer. We have thus sent many of these machines away and everybody is well pleased with them. We send with every order for our CLOVER-GRASS MIXTURES ONLY, amounting to \$20.00 or over, the Chicago Seeder free. Please mention this special offer on your order sheet.

THE CYCLONE SEEDER. PRICE ONLY \$2.15.

THE CHICAGO SEEDER. PRICE ONLY \$1.60.

Grass seed, like all other seeds, should be sown very even. Of the many different machines made we have found none so well adapted for sowing grass or clover seeds as either the "Cyclone" or "Chicago" Seeder, and have them manufactured for our trade.

The machines are built nearly alike, the only difference is, while the "Cyclone" is a geared machine and works with a crank, the "Chicago" Seeder is operated by a bow, moving forward and backward, connected to and revolving the distributor.

The machines weigh 3 and 4 lbs. each, and are suspended by a strap over the shoulder, which hangs in the most convenient manner. It is so simple a boy can use it. Full directions are attached to every machine. Clover, Timothy, Millet, Hungarian, Flax, Rice, Wheat, Oats, Corn and all other grain and seeds can be sown perfectly even and any desired amount (1 qt. to 3 bu.) per acre.

The price is only nominal. We have placed these machines on the market at such a low price that they are in the reach of every farmer, and no matter how little you have to seed it will pay you to buy one.

Cahoon Seeder, Well Known, \$3.75.

ARE OUR CLOVER-GRASS MIXTURES A SUCCESS?

Will it Pay to Sow these Clover-Grass Mixtures instead of Timothy and Clover?

Many farmers ask these questions, and we can only answer by printing heresome of the letters we have received from our brother farmers, and ask you to carefully read them; with the success they had in these unfavorable years, will it not be reasonable to expect equally good results if you sow our Clover-Grass Mixtures now?

Mr. P. Schuh, Gallon, O., writes under date of July 16th, 1894: "Grass in this section is a very light crop this season and Clover and Timothy have made but a medium growth; a ton to the acre is what most farmers cut from their meadows. My meadow, sowed with your Permanent Clover-Grass Mixture in 1892, was just immense; have harvested two large loads per acre of excellent hay, and since cutting it, which was about 3 weeks ago, it has made a wonderful growth again. If it keeps on growing at this rate, the second crop will be almost, if not quite, as large as the first one was. Drought does not seem to affect this Permanent Clover-Grass Mixture. A meadow alongside of mine was sowed the same year and at the time when I sowed your Clover-Grass Mixture, but this is now all over-run with weeds and will have to be plowed up. One grand thing about your Clover-Grass Mixture is that it holds the ground, and it is so thrifty that weeds are actually smothered out. It will not winter-kill, and in my judgment it is the coming grass."

In December Mr. Schuh writes: "Last year I made 6 large loads of hay (averaging about 1½ tons each) off these 3 acres, and the hay is of the finest and of the best quality; but this year, after cutting the grass in June and getting 6 large loads of fine hay from this alone, as written you some time ago, I pastured the aftergrowth and had a splendid fall pasture, although we had no rain to speak of from June until September. Timothy made no growth at all during this time. I recommend your permanent mixed grass seed to all progressive, wide-awake farmers and dairymen."

Mr. T. D. Goodrich, Lancaster, Wis., wrote us under date of September 29th, 1893: "Last February I ordered 200 lbs. of your C. No. 1 Clover-Grass Mixture, which I sowed on the snow in March in a field of winter rye sown the fall before. I secured a fine catch that way and when we cut the rye the stand of grass was fine. It was so nice and thick that I thought it would stand the drought which set in right after harvest, but it being high land it made a difference, for I had some in lower ground where we did not cut the grain, and that is all right, the standing grain being a protection; but where I sowed timothy and clover with oats, this is all killed. Intend to lay down about 30 acres to permanent grass land and will try to get my neighbor to send for your Clover-Grass Mixtures." And under date of December 1st, 1894, Mr. Goodrich writes again: "The Clover-Grass Mixture sown last year was fine. In the month of June it was waist-high, while timothy and clover was only knee-high on ground beside it, on the same quality of soil. I invited one of my neighbors to look at it. He said it was a shame to tramp through it as it was so heavy it left a track like wading in a snow bank. I have no land that I want to seed to permanent meadow or pasture next spring or I would sow this Clover-Grass Mixture again; when I do want a permanent pasture or meadow I shall use it, as I get double the amount of grass per acre from your Clover-Grass Mixture. The new seeding made this spring was on high ground, and the very dry weather was hard on it, but it was a fine stand before the dry time. All my new seeding of timothy and clover on other ground is killed."

E. Oldendorf, Esq., ex-Secretary of Agriculture of the Argentine Republic, graduate of the Royal Agricultural Academy of Hohenheim, member of the Agricultural Patriotic Society of North Germany, etc., writes us, under date of February 9, 1893, from Scappoose, Oregon: "I must say that I was agreeably surprised to see such a thorough, sensible and practical catalogue; surely one of your firm must be a well-trained agriculturalist—German, I suppose! Your mixtures for permanent meadows (different soils) and permanent pastures, also for alternate husbandry, leave nothing to be desired. I shall surely avail myself of your mixtures as soon as I lay down again some of my bottom land into permanent meadow. Permit me to state that we have a farm of a little over 400 acres, mostly very rich creek bottom land, which we are clearing at the rate of 30 to 40 acres per annum, and keep about 60 milch cows. Will put in a creamery soon and push the dairy business as hard as we can, and this means more grass. Grass is King. More grass—more cows and more milk. If you can induce the farmers to farm in proper rotation, with plenty of grass or forage plants in due proportion, you will render the country a great service. How can farming pay with a yield of 13.4 bushels of wheat per acre all over the country? It is preposterous."

On the 25th of July, 1894, Mr. Oldendorf ordered several hundred lbs. of our Clover-Grass Mixture, amounting to nearly \$75.00, and this was sown the last part of September with Winter Oats. On November 4th, he mentioned in a letter that the Grass-Seed Mixture had sprouted exceedingly well, and the stand then was very satisfactory. Of 2 lbs. *Lathyrus silvestris* Wagneri which Mr. Oldendorf ordered of us early last spring, he wrote last fall that he had thousands of fine young plants, which stood the prolonged drought better than any other forage plant.

Prefers 1 acre sown with our Clover-Grass Mixture to 2 acres of his best Timothy and Clover.—That is what Mr. Wm. Vick, Secretary of the Alta Vista Creamery Association, Alta Vista, Ia., wrote us under date of November 2d, 1892. He said: "In the spring of '92 I sowed 12 acres with your Clover-Grass Mixture, 6 acres with flax and 6 acres with oats. Both pieces have done very well and look the same. I kept the cattle off after the grain was cut, and to-day the Clover-Grass Mixture is so good that if I wanted to cut it I could get a good crop of hay from it. I think that to-day I would prefer 1 acre of this Clover-Grass Mixture to 2 acres of my best timothy and clover. Will order more next spring." On December 4th, 1893, Mr. Vick wrote us: "The Clover-Grass Mixture I sowed last year I cut in June and the yield was very satisfactory. I intended to cut it again in the fall but the severe drought last summer did not permit it, so I only used it for pasture this fall, which was very good."

Mr. H. Gakemeier, Murdock, Neb., sowed 40 acres with our Clover-Grass Mixture for permanent pasture. He writes us under date of December 12th, 1893: "Of the 40 acres sowed with your Clover-Grass Mixture for permanent pasture in the spring of 1892, it seemed impossible to expect anything from it, owing to the very unfavorable weather we had then, so I thought best to plow up 20 acres of it and seed anew and see what would become of the other 20 acres. Now, this past summer these 20 acres have done splendidly in spite of the dry weather and afforded very good and sufficient pasture for my stock, while the new seeding on the other 20 acres I plowed up last fall and sowed again at that time has suffered so from the drought that it is all gone now. I wish I had followed your advice and not plowed this piece up at all. Have found out that the grass plants are very hardy." On December 1st, 1894, Mr. Gakemeier writes as follows: "Will let you know that the Clover-Grass Mixture I bought of you and sowed 3 years ago has done very well this past very dry summer. I had a very fine pasture, and the best one anywhere, all through the summer, and we all know that it was very dry, only in August it was a little short for a short time, but just as soon as we had a little rain it recovered and was just as nice as before, and I had good pasture until the 1st of November. Of the other 20 acres plowed up 3 years ago, I have not yet secured a good stand, owing to the very unfavorable weather the past two years. I made a very great mistake when I plowed this up and it has already cost me \$100.00 by what I lost through it."

(When Mr. Gakemeier wrote us about the not very favorable stand he intended to plow up the whole piece of 40 acres, but I persuaded him not to do it, knowing from experience how grass seed will stool and grow if only a little life in it; but he still plowed up 20 acres, which has proven very expensive so far, as he himself states. Now, several have written and asked our advice in regard to similar cases, and these would do well to profit by the experience of Mr. Gakemeier.—O. KOZLOWSKI, Manager Farmer Seed Co.)

Mr. W. Bente, Farley, Mo., wrote us the 22nd of October, 1894: "This fall I secured a very heavy second crop of the Alsake Clover I sowed last year, but the very dry summer cut the first crop down considerable; after a nice rain in August it recovered and gave a heavy second crop. The hay is much finer from this Alsake Clover than from Red Clover, and horses like it much better, as well as all stock."

"New seeding of our Clover-Grass Mixture last spring, under grain, gave good fall pasture, notwithstanding the long drought." So writes Mr. W. Mills, Cecil, Wis., on the 30th October, 1894. "Sowed the Clover-Grass Mixture this spring with oats and it came fine; at the time of cutting the oats it was already 3 inches high, then came the drought and everything was gone, and all summer nothing was there and I had long given up all hope of ever seeing anything again on this piece; but now it looks quite different since we had a few little showers in the fall and the stand is excellent, yes, so good that I have a good pasture for my cattle now at this time. Sowed, also, last fall about 2 acres with your Clover-Grass Mixture for permanent meadow. It was rather late then, but it came nice this spring and I cut 3 good loads of fine hay from it; am satisfied."

"Our Clover-Grass Mixtures are the right thing for this country," said Mr. L. F. Bailiff, Vanzant, Mo., who writes to us on the 26th of October, 1894: "On a piece of about $\frac{3}{4}$ of an acre, which is black soil and wet till about July 1st, and which was plowed in an inferior manner last year, I sowed about 10 lbs. of B. No. 3 of your Clover-Grass Mixture on the 3d of April, 1894. In 6 weeks some of the grasses and clovers were 9 inches high. I now see that I made a mistake by not having killed the wild nature out of the ground and the soil pulverized. Notwithstanding the severe drought of the present season, almost all the varieties have done well, the Alsake is still blooming and all the other varieties are nice and green, although the weather is quite dry. I am satisfied that these Clover Grass Mixtures are the right thing for this country and will sow more later."

Mr. L. Hoffman, Dillon, Kans., writes us, October 27th, as follows: "The Clover-Grass Mixture I ordered of you was very good. I sowed it by itself without a nurse crop and it came up fine and the stand was all that could be desired before the long drought came; some of it died, but other varieties are now nice and green and the outlook for a good stand next year is satisfactory. Of the 100 lbs. of Johnson Grass I sowed in the spring I have made at the rate of 2 tons of hay per acre this summer, and cattle as well as horses like it very well. Of the Millet bought of you I made at the rate of 3 tons of splendid hay per acre. Would advise everybody not to sow grass seed with a nurse crop, especially not in this country. We had the driest summer here this year that we have had in 80 years."

Please turn to pages 34 and 63 for more evidence, and read what our brother farmers in all parts of the country, who have tried our Clover-Grass Mixtures, think of them. We hope you will arrange and try at least a few acres this year.

We can print but a few of the many letters we receive every year, for they would fill pages and pages of our catalogue, but these letters will go to prove the superiority of our Clover-Grass Mixtures. During the past very dry summer, meadows or pastures sown with our Clover-Grass Mixtures two or three years ago have stood the drought much better and yielded full crops, while ordinary meadows yielded only half a crop and less. This will prove again that a permanent pasture or meadow cannot be obtained by using Timothy and Clover alone, and that our Clover-Grass Mixtures will give permanent pastures and meadows which will not be easily affected by drought.

Furthermore, the new seedings of our Clover-Grass Mixtures have stood the long drought during the summer months much better than the new seedings of Timothy and Clover made last spring. The new seedings of our Clover-Grass Mixtures show very promising results after the fall rains, while the new seedings of Timothy and Clover have nearly all disappeared.

LATHYRUS SILVESTRIS, OR FLAT PEA.

The new Forage Plant for Barren Soils and Dry Regions.

THE LATHYRUS PLANT.

It might truly be called an agricultural wonder. It has long been known in its wild state in Europe, and for about 30 years it has been cultivated in Germany. It was introduced into this country a few years ago and raised successfully at the Experimental Grounds of the Michigan Agricultural College. Last year it was generally introduced and successfully grown by thousands of farmers. It seems to be the plant for barren and dry soils; able to withstand prolonged drought. Those who have held off and did not try it last year will do well to do so this spring.

On very poor, unimproved, sandy soil it makes a top growth of 6 to 8 inches and a root growth of 12 to 15 inches the first year. The tops are not easily cut down by frost and the roots go through the winter well. It starts to grow early in the spring and continues to grow till late in the fall. Two or three cuttings can be made in one season and a large amount of very rich hay can be secured from a comparatively small area. It is excellent for pasturage as well as for hay. According to chemical analysis it is twice as rich for feeding stock or enriching the soil as Alfalfa or Clover. It was found that 5 tons of Lathyrus hay are equal to 8½ tons of ground barley in feed value. The yield is enormous; one-year-old plants gave

at the rate of 10,460 lbs. of green forage per acre. The mature plants root 30 feet deep, enabling them to stand the severest droughts and extreme cold. It lasts 50 years without reseeded. Like all long-lived plants, it grows slowly at first, and needs care to keep down the weeds.

Price of Seed: Pkt., 10c.; 3 pkts. for 25c.; oz., 30c.; ¼ lb., 75c.; ½ lb., \$1.45; 1 lb., \$2.70.

We expect to have some plants of Lathyrus to offer again this spring, and those who wish some should write us early for prices.

SAND VETCH.—*Vicia villosa*.

A splendid forage plant, which is new in this country although very largely grown in Europe and particularly in Germany. It is especially well adapted for light, sandy or poor soils, although it succeeds on all soils. It is hardy and does not suffer from drought, which makes it particularly valuable. Its cultivation is easy, sowing the seed broadcast at the rate of 30 lbs. per acre, covering it with a harrow. It is best sown in spring, although it can be sown in fall with Winter Rye, when it will produce a heavy crop of nutritious herbage early the next spring. By reason of its quick growth it can be sown any time in spring or summer, occupying the ground but a short time, when a heavy crop can be cut or plowed under; it can therefore be called a valuable catch crop.

After it once becomes known we think it will take the place of Cow Peas and similar plants for plowing under, or green manure and forage.

Price: Per lb., 15c.; 25 lbs., \$3.50; 50 lbs., \$6.50; 100 lbs., \$12.00

BROMUS INERMIS.—A very valuable grass, especially for hot and dry climates; should be sown this year by every farmer, if only for trial. (See last cover page.)

SACALINE.—A new valuable fodder plant. (See third cover page.)

SAND VETCH.

DWARF ESSEX RAPE.

DWARF ESSEX RAPE.

There is no other plant as valuable for fattening sheep as Rape, and after it once becomes generally known it will be appreciated. The largest sheep raisers in this country, as well as in Europe, know the value of Rape for fattening sheep and will not be without it, for when sheep and lambs are turned in upon it they will soon "weigh like lead."

CULTURE: A practical sheep grower of Dodge Co., Wis., cultivates his Rape as follows: About the first of July a piece of land is prepared very nicely and the Rape drilled in with a Planet Jr. seed drill, using about 2½ lbs. of seed per acre, drills to be 3 feet apart. Drilling closer is not advisable as it grows very rank and spreads out between rows. The seed germinates very rapidly and in about a week the rows can be seen clear across the piece. With a hand cultivator, which is then run close to the rows, all weeds and grass are killed, and about a week later it is cultivated again. By the last of September it is grown up so rank that the whole ground is covered, affording large quantities of very valuable food for the sheep or lambs. On clean and rich soil it can also be sown broadcast, using 5 to 6 lbs. of seed per acre. It is thus sown in May and cut or pastured off when sufficiently advanced, when it will grow up again and may be used a second time in the same manner; but ordinarily the best results are obtained when sown during the last half of June or first half of July. It is also of great value as a catch crop, as it grows better late rather than earlier in the season. When a grain crop, therefore, has failed from any cause whatsoever, there is ample time to plow the land and sow Rape upon it. It can also be cut and

put up like hay before winter, if it is not wanted for pasture, and can then be drawn and fed as desired.
PRICE: By mail, postpaid, large pkt., 10c.; 1 lb., 40c.; 2 lbs., 75c. By express or freight, 1 lb., 30c.; 10 lbs., \$2.50. It is very important that nothing but the genuine Dwarf Essex Rape is sown, for other varieties are sold by some dealers, but their cultivation is not satisfactory. We have a stock of the genuine imported seed.

SPRING VETCHES OR TARES.

Vicia sativa.

A very productive and highly nutritious fodder plant; is grown very extensively in England, also in Canada. It is either cut green for soiling or made into hay. It is well liked and greatly relished by cattle. It is sown broadcast in spring at the rate of one bushel per acre. Per lb., 7c.; 50 lbs. (1 bu.), \$3.00, by express or freight.

VETCHES, OATS AND SPRING RYE, when mixed proportionately and sown broadcast at the rate of 50 lbs. per acre, we do not know of anything that will produce as much feed as this. Dairy farmers or others, where soiling is practiced, will find it almost impossible to get along without it when once they have tried it and know its value. We put this up mixed in the right proportion, and many of our patrons sow several acres every year. 50 lbs., \$1.75; 100 lbs., \$3.15.

GOLDEN VINE FIELD PEA.

Like the Canada Field Pea, it is very valuable for soiling purposes and comes very serviceable for green fodder. They are sown broadcast at the rate of 1½ to 2 bu. per acre. Peck, 45c.; bu., \$1.45; 2 bu., \$2.80.

WILD RICE.—*Zizania aquatica.*

As an attraction for wild fowl it cannot be equaled. In large ponds and lakes it purifies the water and affords a refuge for the small fry from the large fish, also furnishing them plenty of food from the animalculæ upon its stalks. For planting in fish ponds it is especially desirable. It can be sown broadcast from a boat in from 1 to 5 feet of water, having a mud bottom, and grows very rapidly. It also does well along the shores of marshes and makes a good hay. Cattle are fond of it. By mail, postpaid, 1 lb., 30c.; 4 lbs., \$1.15. By express or freight, lb., 20c.; 10 lbs., \$1.90; 20 lbs., \$3.60.

RUSSIAN HEMP.

Very desirable for fattening purposes, and can be fed like linseed, of particular value for fattening fowls or for bird seed. Sow in May, broadcast, at the rate of 15 to 20 pounds per acre. 1 lb., 20c.; 4 lbs., 75c., postpaid. By express or freight, 1 lb., 15c.; 10 lbs., \$1.25; 20 lbs., \$2.25.

LUPINS.

One of the best plants known for reclaiming poor and particularly sandy and old, worn-out land; by plowing in the Lupins such land can be made very valuable. It is so highly valued in Germany that it is called the "Gold of the Desert" or "Desert Reclaimer." When dried for fodder it is very good for sheep. Lb., 20c., postpaid. By express or freight, lb., 10c.; 10 lbs., 90c.; 100 lbs., \$8.00.

Are you familiar with Crimson Clover, and have you ever tried it? If not, then read page 10, and it will be well to try some this spring.

SPRING VETCHES OR TARES.

Seradella or Cultivated Birdfoot. The best Green Food for Milch Cows.

For light, poor or sandy soils Seradella is one of the best fodder plants. We know its great value and have urged our brother farmers for several years to give this valuable forage plant more attention. In Germany large tracts are sown in sections where the soil is light or sandy, and several years trial here has convinced us that it is equally valuable for this country. Whoever is not familiar with it should try at least one acre this year. Equally valuable for soiling, green fodder, hay or pasture.

Culture: It can be sown either by itself or in Winter Wheat or Rye; 15 or 20 lbs. per acre are sown by itself in early spring on pretty well prepared ground and the seed harrowed in. If wanted for hay it is cut in August, and by the latter part of September it will be grown up enough to be cut again for green fodder. For soiling or to be fed green, it is cut in June the first time and in a few weeks the second time; when sufficiently started again after cutting it the second time, it is pastured until late in fall. When wanted for pasture alone it will give the best and richest pasture for milch cows from May until fall. When closely grazed it is remarkable for its quick aftergrowth. In Winter Wheat or Rye it is sown in early spring at the rate of 10 to 15 lbs. per acre, and after the grain is cut it begins to grow rapidly, and in a few weeks from harvest until late in the fall it will be the best pasture for milch cows on the whole farm.

It is very remarkable for its drought-resisting qualities and dense, close and thick growth, covering the ground completely and choking out all weeds; also very desirable as a catch crop. It is not a perennial but can be cut twice and give good fall pasture in one year.

Price: Prepaid, by mail, oz., 10c.; lb., 25c.; 4 lbs., 90c. By express or freight, lb., 15c.; 10 lbs. (for 1 acre), \$1.40; 20 lbs., \$2.60; 50 lbs., \$6.25; 100 lbs., \$12.00.

GIANT SPURRY.

Like Seradella, Spurry is of equal value for light or thin ground, and several years' experimenting at the Michigan Agricultural College have proven that it is the only plant which can be grown on poor, sandy, dry soil that will surely return a paying yield. Dr. Manley Stiles, of Lansing, Mich., calls it the clover of sandy soils, yielding 7,700 lbs. per acre; and in another report to the Michigan Agricultural Station it says: "The Spurry has shown wonderful productiveness. Its value as a manurial plant on light sands is pronounced. It seems to enrich the soil more rapidly than any other plant used. It is readily eaten by cows, sheep and cattle."

Culture: It is of very rapid growth and is sown the latter half of March and in April or May at the rate of 10 lbs. per acre, if wanted for hay. The seed is sown broadcast on pretty well prepared ground and covered lightly by harrowing. It germinates quickly, and in from 6 to 8 weeks is ready to cut. It is usually cut for hay the first time and pastured afterwards for the rest of the summer. If wanted as a fertilizer, 20 lbs. are sown per acre and when 15 to 20 inches high plowed under; two crops can be plowed under in one year, on account of its quick growth. It is not a perennial and must be seeded every spring.

Price of Giant Spurry: Prepaid, by mail, oz., 10c.; lb., 25c.; 4 lbs., 90c. By express or freight, lb., 16c.; 10 lbs. (for one acre), \$1.50; 50 lbs., \$6.00; 100 lbs., \$11.00.

Common or Small Spurry does not grow so high as the Giant Spurry, otherwise it is the same. Price, by express or freight, lb., 14c.; 10 lbs., \$1.30; 50 lbs., \$5.50.

Please read pages 17 and 18. Who wrote these letters? Our brother farmers who have sown our Clover-Grass Mixtures. Would it not be well to try a few acres of it this spring on your farm?

GERMAN OR GOLDEN MILLET.

One of the best for hay or fodder crops, giving enormous yields. It is well known everywhere and is of great value as a catch-crop. About 3 pks. are sown per acre. (Weight per bu., 50 lbs.) Owing to the great drought last summer our crop was cut very short, but as long as our stock lasts we fill orders at the low prices named below, reserving the right to change to market prices when stock is exhausted. Price, \$1.45 per bu.; bag of 2½ bu., \$3.50.

HUNGARIAN MILLET.

Like Millet, it is well known. It is preferred by many because it makes finer fodder and hay. It can be sown after hay is cut, or even in the stubble, when it is turned over and prepared right after cutting the grain. About 3 pks. are sown per acre. Price, \$1.45 per bu.; bag of 2½ bu., \$3.50.

For quantities of Millet Seed or Hungarian, please write us for special prices, which we will quote by return mail.

NEW HOG MILLET.

This Millet has been grown for years here in Minnesota and the Dakotas and within the last few years been put on the market under various names, such as Manitoba or Russian Millet, Broom Corn Millet, etc. It is unlike the German Millet, or Hungarian, in habit of growth, having a branching head, and in the appearance of the seed, which is much larger. It is a very valuable crop to raise for fattening swine. Hon. F. H. Smith, of South Dakota, in a letter to the *American Swineherd*, of Chicago, said,

"It might be interesting to some of your readers to know what can be accomplished in raising and fattening swine here, in the northern tiers of counties, in South Dakota, where the raising of corn has not been a success. I will give my experience for this season: I had 31 head of hogs which I raised and fattened on Millet seed, which made an average weight of 524 pounds on foot, and I fattened one hog that weighed 931 pounds. This hog gained for the last thirty days two and one-fifth pounds per day. This Millet makes pork that is second to none. It is a sure crop, grows quickly, and is in no danger of frost. It is cheaper than corn, and just as good, if not better, for fattening hogs."

CULTURE: It is sown the first half of June, at the rate of one-half bu. per acre, the seed not covered too deep. In about 60 days it will be ready for harvest. The seed ripens while the fodder is yet green, hence it can be cut and used for both hay and seed with equally good success. It grows from 3 to 4 feet high, has an abundant growth of blades on the main stalk, making it very valuable for hay. Some farmers turn their hogs into the Millet field as the seed begins to ripen. (See the letter above.) When wanted for the seed and hay, from 30 to 60 bushels of seed can be raised per acre, besides the fodder or hay. For feeding, the seed should be ground, and for hogs it should be soaked for 12 hours or so. For other stock it need not be soaked. For fattening purposes the seed is as valuable as corn, bushel for bushel. Let everyone give it a trial this spring, with a few acres or so; it does not cost so very much.

PRICE: ½ bu., 90c.; bu., \$1.75; sack of 2½ bu., \$4.12.

KAFFIR CORN.

A variety of Sorghum, and very valuable as a forage plant or when cultivated for seed. When wanted mainly for fodder, it can be cut when the first seed heads come into bloom; the second growth springing at once from the roots, will mature in a climate like Central Missouri a full crop of grain and a second crop of fodder. We have known the seed to ripen in Will county, in the northern part of Illinois. It will resist severe drought, and has yielded paying crops of grain and fodder in very dry seasons and on poor land, when other corn has utterly failed. Cultivated nearly like corn. Sown in rows 3 feet apart, using 4 to 5 lbs. seed per acre. 1 lb., 25c.; 4 lbs., 90c.; postpaid. By express or freight, 1 lb., 12½c.; pk., 12½ lbs., \$1.00.

JERUSALEM CORN.

A new forage plant, belonging to the non-saccharine sorghums, claimed to be one of the best and surest crops for dry countries. The grains are pure white and nearly flat. Three to four lbs. of seed will plant 1 acre. Large pkt., 10c.; lb., 25c.; 4 lbs., 90c.; postpaid.

BRAZILIAN FLOUR-CORN.

A variety of Indian Corn, imported a few years ago from Brazil, and has proven to be very valuable in the United States. It is very productive, often sending up 10 to 15 shoots, each with 5 to 10 ears. The kernels are pure white, and, when ground into flour, it is considered equal to the best wheat flour, and the bread is said to be of the finest taste and flavor. Cooked when green, it is equal to the best sweet corn. It will ripen where other corn does, and is cultivated the same. The stalks are sweet, tender and juicy, with an abundance of leaves, unequaled for fodder. Plant 5 to 6 qts. per acre. Large pkt., 10c.; pt., 25c.; qt., 40c.; postpaid. By express or freight, qt., 25c.; 5 qts., 85c.

BRANCHING DOURA.—Yellow Milo Maize.

Highly valuable because of its certainty to produce heavy crops on poor, dry soil. The quantity of green fodder, for which stock shows a marked partiality, is enormous. The seed heads grow very large, producing a large quantity of grain, which is superior food for fowls. Cultivate same as corn; plant 4 to 6 lbs. per acre. Large pkt., 10c.; lb., 30c.; postpaid. By express or freight, lb., 20c.; 10 lbs., \$1.75.

TEOSINTE.—Reana lucurians.

A wonderfully productive forage plant, adapted more for the South, but we have grown it in this vicinity successfully. It suckers more than any forage plant, producing 20 to 30 stalks from one kernel of seed, very thickly covered with leaves, yielding such an abundance of forage that one plant is considered sufficient to feed a pair of cattle for 24 hours. Seed is very scarce. Price: Large pkt., 10c.; oz., 20c.; ¼ lb., 50c.; lb., \$1.75; postpaid.

NEW HOG MILLET.

Miscellaneous Farm Seeds.

NEW EVERGREEN BROOM CORN.

For general cultivation the best variety on account of color and quality of brush, ripens early, grows 8 to 10 feet high, grows of good length, fine and straight, and it does not get red in the field before it is cut but remains strictly green, consequently brings always the highest market price. Large pkt., 10c.; lb., 25c., postpaid. By express or freight, peck, 75c.; bushel (50 lbs.) \$2.45.

NEW JAPANESE BROOM CORN.

The earliest broom corn known, matures in about 75 days, can therefore sometimes be planted as a catch crop or even after wheat. Brush is fine and long, without center stalk. Large pkt., 10c.; lb., 30c., postpaid. By freight or express, peck, 75c.; bushel, \$2.50.

IMPROVED MINNESOTA EARLY AMBER SUGAR CANE.

Get the pure seed of the improved Minnesota Early Amber; its earliness adapts it to almost any section; when planted in the fore part of May, it will yield a good crop of ripe seed and 140 to 240 gallons of syrup per acre. We have a good stock of the pure seed. Large pkt., 10c.; lb., 25c., postpaid; 5 lbs., 60c.; 20 lbs., \$2.00.

CARAWAY.

We recommend this for sowing into pastures as it will prevent bloat or similar diseases, and is highly relished by cattle. Sow 2 to 5 lbs. per acre. Lb., 75c.; 3 lbs., \$2.00, postpaid.

TOBACCO SEED.

The following varieties of tobacco seeds, which have been carefully grown, are true to name and of best vitality. We can recommend them to our patrons.

PRICES on all varieties, including postage: Pkt., 5c.; oz., 20c.; $\frac{1}{4}$ lb., 75c.; 1 lb., \$2.00.

GENERAL GRANT.—Considered the earliest grown, and is one of the finest for cigars. The leaf has extremely small veins, is of the finest possible texture, and very elastic.

PRIMUS.—Yields large crops of extra fine quality; well adapted for planting north, being very early.

BIG HAVANA.—A hybrid Havana or Cuban seed leaf. A heavy cropper, of fine texture, delightful flavor and the earliest cigar variety to mature and ripen. Will make two crops from one planting in the south, while its earliness makes it most desirable for high latitudes.

CONNECTICUT SEED LEAF.—One of the most popular varieties, and in many localities the staple crop.

ORONOCO.—A favorite for the 'Homespun' wherever known. An old variety and a good one. Has a large, broad, finely shaped leaf.

LANCASTER BROAD LEAF.—Single leaves are sometimes $3\frac{1}{2}$ feet long by $2\frac{1}{4}$ feet wide. For cigar stock this is one of the very best varieties.

STERLING.—The newest and brightest of the yellow type, and being the earliest to ripen, is surest in localities liable to early frosts.

COLLECTION of 1 pkt. each of the above seven varieties, 30c.; one ounce of each, \$1.25, postpaid.

FOREST TREE SEEDS.

The time is coming, not only surely, but very rapidly, when a few acres, covered with our best forest trees, will be of great value. Any piece of ground uncultivated or cultivated at a loss should be planted to forest trees, and few investments made by our farmers will return a larger profit in the course of a few years. The seeds should be sown in early spring, as soon as the ground can be worked, in beds of fine, sandy loam. Cover to about the depth of the thickness of the seed, and press the beds gently with the back of the spade to firm the earth around the seeds, then water sparingly with a fine spray, shade and protect the young plants from the hot sun and drying winds, and don't allow the weeds to choke them out, and let them remain one or two years before transplanting. Prices include postage.

SCOTCH PINE.—*Pinus Sylvestris*.—One of the most valuable, is tough and hardy, growing surely and rapidly on nearly every variety of soil in any climate. Its extreme hardness, together with its dense foliage, make it of great value for shelter on our western prairies. Prof. C. S. Sargent says: "It is the most valuable tree farmers can plant for screens and wind breaks about their fields and buildings." Package, 5c.; 1 oz., 15c.; $\frac{1}{4}$ lb., 50c.; 1 lb., \$1.75.

WHITE PINE.—*Pinus Strobus*.—Thrives best in a light sand with clay subsoil, preferring plains to higher lands. The most valuable of all our native pines. Package, 5c.; 1 oz., 20c.; $\frac{1}{4}$ lb., 75c.; 1 lb., \$2.50.

SILVER FIR.—*Pinus Pectinata*.—Very valuable, growing to a large size; rather tender when young, but entirely hardy as they grow larger. Package, 5c.; 1 oz., 15c.; $\frac{1}{4}$ lb., 40c.; 1 lb., \$1.50.

BOX ELDER.—*Acer negundo*.—The easiest grown and most successful of all tree seeds generally planted; grows very rapidly and will produce the largest amount of fuel in the shortest time of any of our hardy trees planted. Very desirable for planting on timber lands. Price, $\frac{1}{4}$ lb., 15c.; 1 lb., 40c., prepaid. 1 bushel (10 lbs.), not prepaid, \$1.75.

BALSAM FIR.—Very desirable for ornamental purposes; grows rapidly in any variety of soils. Its growth is regular and symmetrical, the foliage is of a beautiful rich green, and retains its color through the severest winters. Package, 5c.; 1 oz., 20c.; $\frac{1}{4}$ lb., 60c.; 1 lb., \$2.00.

NORWAY SPRUCE.—*Pinus excelsa*.—A very hardy variety, easily grown from the seed; good timber and a close wind-break, valuable for ornamental purposes. One pound contains about 20,000 seeds. 1 pkt., 5c.; 1 oz., 20c.; $\frac{1}{4}$ lb., 50c.; 1 lb., \$1.50.

ARBOR VITAE.—*Thuja occidentalis*.—Excellent for hedges or as a wind-break, grows easily from seeds. 1 pkt., 5c.; 1 oz., 20c.; $\frac{1}{4}$ lb., 75c.; 1 lb., \$2.00.

WHITE ASH.—*Fraxinus Americana*.—Is adapted to a wide range of soil and climate, an extremely rapid grower and one of the most valuable varieties for forest planting, because the lumber is becoming scarce and brings a high price in the market. Very easy to transplant or grow from seed. 1 oz., 10c.; $\frac{1}{4}$ lb., 15c.; 1 lb., 50c.

WHITE BIRCH.—*Betula alba*.—A very ornamental tree and easily grown. 1 pkt., 5c.; 1 oz., 10c.; $\frac{1}{4}$ lb., 35c.; 1 lb., \$1.00.

HARDY CATALPA.—*Catalpa Speciosa*.—Sow thickly in rows about 4 feet apart, in April or May, and cover to the depth of $\frac{1}{2}$ inch, and keep free from weeds. Transplant to their permanent places the next spring, and cultivate for two seasons. Is of very rapid growth and has proven itself hardy as far north as Dakota; is well adapted to plant on the vast treeless prairie of our Western States. 1 oz., 10c.; $\frac{1}{4}$ lb., 25c.; 1 lb., 90c.

OSAGE ORANGE.—The best of all hedge plants. The seeds germinate slowly, and should be sprouted first by soaking several days in warm water. Plant in drills 20 inches apart. A pound of seed will produce 5000 plants. 1 oz., 10c.; $\frac{1}{4}$ lb., 15c.; 1 lb., 40c. Not prepaid, bushel of 33 lbs., \$5.50.

HONEY LOCUST.—Furnishes valuable timber and is of rapid growth. 1 pkt., 5c.; 1 oz., 10c.; $\frac{1}{4}$ lb., 20c.; 1 lb., 50c.; 5 lbs., not prepaid, \$1.50.

LOCUST, BLACK OR YELLOW.—Very desirable, making a very rapid growth of hard durable timber. One ounce contains about 1200 seeds. 1 pkt., 5c.; 1 oz., 10c.; $\frac{1}{4}$ lb., 15c.; 1 lb., 40c.

LINDEN EUROPEAN.—*Tilia Europaea*.—A great favorite in Germany for ornamental planting. Very valuable for all bee keepers, as no flower yields better honey or in greater abundance. 1 pkt., 5c.; 1 oz., 10c.; $\frac{1}{4}$ lb., 35c.; 1 lb., \$1.00.

WHITE MULBERRY.—*Morus Alba*.—Grows readily and rapidly from seeds, succeeding almost anywhere where corn will grow. 1 pkt., 10c.; 1 oz., 20c.; $\frac{1}{4}$ lb., 60c.; 1 lb., \$2.00.

RUSSIAN MULBERRY.—Is mostly planted for silk worm culture. Grows very rapidly, is very easily cultivated and can be trimmed to a fine hedge. The fruit is similar to the Blackberry and quite palatable. 1 pkt., 10c.; 1 oz., 20c.; $\frac{1}{4}$ lb., 65c.; 1 lb., \$2.25.

Maple, hard and soft, Beech, Hornbeam, Hawthorn.

The Two Best Mangels for Stock.

We mail
a Garden for
ONE DOLLAR,
Consisting of

33 Packets Selected
Northern-grown
Vegetable Seeds
and 1 Packet
of finest
Flower Seed
Mixture.
See
page
57.

IMPROVED MAMMOTH LONG RED.

The best red Mangel cultivated. Grows to enormous size, yields heavily (from 50 to 70 tons per acre), and is of high feeding value. Is easily harvested, as the roots grow well over ground.

We select only the largest roots of true type, and produce a superior strain of this valuable Mangel. Our price is low. By mail, postpaid, pkt., 3c.; $\frac{1}{4}$ lb., 12c.; lb., 38c. By express or freight, lb., 28c.; 5 lbs., \$1.30; 10 lbs., \$2.50.

12 Sample
Packages of
Grain for only
10c., postpaid.

12 Sample
Packages of
Grass Seeds
for only 10c.,
postpaid.

Golden Tankard Mangel Wurzel.

A valuable and very popular variety in Europe, on account of its nutritious and milk-producing qualities. The flesh is a bright golden yellow and contains more sugar and nutritive matter than any other variety. Milch cows and sheep have a marked partiality for it. It is very productive with good cultivation; will yield 60 to 70 tons per acre, and its almost cylindrical shape, narrowing abruptly at both ends, will permit of its being easily pulled and harvested. Price, postpaid, by mail, pkt., 3c.; $\frac{1}{4}$ lb., 14c.; lb., 43c. By express or freight, lb., 33c.; 5 lbs., \$1.55; 10 lbs., \$3.00.

CHAMPION YELLOW GLOBE.

—A good keeper, very productive, and adapted for growing in shallow soils. Roots grow to a large size and are round or of globular form. Pkt., 3c.; $\frac{1}{4}$ lb., 12c.; lb., 38c.; postpaid. By express or freight, lb., 28c.; 5 lbs., \$1.35.

RED GLOBE.—Similar to the above, only different in color. Same price.

THE HEAVIEST CROPPING CARROT

Victoria

The largest and unquestionably the heaviest cropping and most nutritious yellow carrot cultivated. The roots are remarkably fine, very symmetrical and of excellent quality, possessing high feeding properties. It is a heavy cropper on all soils, but especially adapted for strong or rich land.

Price: By mail, postpaid, pkt., 4c.; $\frac{1}{2}$ lb., 18c.; lb., 68c. By express or freight, lb., 60c.; 5 lbs., \$2.75.

CARROTS FOR HORSES AND COLTS.

Of all root crops there is none so well adapted for horses, and particularly for colts, as carrots. In Europe they are largely grown for this purpose and the farmers know the value of raising and feeding carrots to their stock. Every farmer feeding carrots daily to his horses and colts, particularly in fall and spring, will find them better than all condition powders; distemper and similar diseases amongst his horses will be unknown to him. Try a small patch of carrots, farmers, and see if they don't pay. Sow as early in spring as the ground can be worked, in drills far enough apart so they can be cultivated with a horse cultivator; 3 to 5 lbs. of seed are required to sow 1 acre.

LONG WHITE BELGIAN CARROT.—

Grows one-third above ground and to a large size. Root is pure white, but the top green. Easily harvested and very productive. Price: By mail, postpaid, pkt., 3c.; $\frac{1}{4}$ lb., 16c.; 1 lb., 58c. By express or freight, lb., 50c.; 5 lbs., \$2.40.

LARGE ORANGE BELGIAN.—

Another very good variety for stock feeding, like the above, but yellow. Price: By mail, postpaid, pkt., 3c.; $\frac{1}{4}$ lb., 16c.; lb., 58c. By express or freight, lb., 50c.; 5 lbs., \$2.40.

SUGAR BEETS.

VILMORIN'S IMPERIAL.—An improved French variety, exceedingly rich in sugar. Under average conditions it has yielded 14 tons of roots to the acre, containing about 16 per cent of sugar. Large pkt., 3c.; $\frac{1}{4}$ lb., 15c.; lb., 40c.; postpaid. By express or freight, lb., 30c.; 5 lbs., \$1.40; 10 lbs., \$2.75; 50 lbs., \$13.50.

KLEIN-WANZLEBEN.—This is cultivated on a larger scale than any other sugar beet. The root is conical, straight and even, quite large at the head and rapidly tapering. It is a heavier yielder than the foregoing and contains from 13 to 15 per cent of sugar. Large pkt., 3c.; $\frac{1}{4}$ lb., 15c.; lb., 55c.; postpaid. By express or freight, lb., 45c.; 5 lbs., \$2.20; 50 lbs., \$20.00.

JERUSALEM ARTICHOKES.

They are the cheapest and healthiest hog food raised. (Producing from 400 to 1,000 bushels per acre.) They need not be dug in the fall; the hogs should be turned in and will help themselves by rooting for them. They should be planted early in the spring, cut small like potatoes, one eye to a cut being sufficient. They are sometimes used as a table vegetable when pickled, but their greater value is for feeding stock. Plant 1 bbl. per acre. Price, Pk., \$1.00; bu., \$2.25; bbl., \$4.50.

LINCOLN OAT.

An Agricultural Wonder

Within the two years that the Lincoln Oat has been introduced it has been grown in every state and under all conditions of soil and climate by thousands of our brother farmers, and proven without a doubt that it is the best white Oat for general cultivation. In every instance has the Lincoln Oat far exceeded all other sorts when sown side by side, and proven all we claimed for it. In the very dry past summer it has outyielded all other sorts and proven itself to be equally well adapted for hot, dry seasons or for unfavorable and even wet weather, as it is not liable to lodge, on account of its stiff straw, or rust.

For the largest yields from 7 single bushels of seed sown \$500 in cash prizes were paid, and these 7 bushels brought the enormous yield of 817 bushels 21 lbs. of well-cleaned oats, or an average of 116 bushels from EACH BUSHEL of seed.

The yields for which the prizes were awarded stood in the following order:

	Machine Measure.	Measure by Weight.	Amount.
A. M. Hightower, Stevensville, Mont.....	149 bu.	174.19 bu.	\$200.00
G. L. Gordon, Willow Creek, Mont.....	132 bu.	163.22 bu.	100.00
J. F. Wood, Stevensville, Mont.....	103 bu.	123.08 bu.	75.00
R. L. Bradley, Padilla, Wash.....	.....	120.13 bu.	60.00
Wm. Gans, Millard, Neb.....	79 bu.	78.13 bu.	35.00
R. N. Lewis, Red Hook, N. Y.....	68½ bu.	76.16 bu.	20.00
James Young, Sheldon, Mont.....	64 bu.	75.12 bu.	10.00

Note that the oats weighed nearly 100 bushels more than they measured, and that these enormous yields were from a single bushel of seed only, not from one acre, on which 2 bushels and more are frequently sown.

We have had many years' experience in growing all the standard and new varieties of oats and are capable of judging its merits. We thoroughly believe that the Lincoln Oat is the best white oat now grown, and wish to call attention to a few special points of excellence, why it is the best and superior to all other sorts:

First—The Lincoln Oat is very productive and has always yielded one-third more than any other sort grown in the same locality or side by side. Second—It is very early. Third—So far has proven itself entirely RUST PROOF. Fourth—It stands up better than any other sort, on account of its heavy and stiff straw. Fifth—It is best for feeding, on account of its thin hull, heavy meat and soft nib. Sixth—It is best for oatmeal or grinding, for the same reason.

Of all the letters from the many who have grown the Lincoln Oat in all parts of the United States, not one has an unfavorable opinion of it, but all sustain the above claims for this grand oat, and this we regard as the best testimony. We recommend it, therefore, to sow for a general crop everywhere. It grows unusually strong, stiff and bright straw, free from rust, and will produce a crop if any oats in the world can. This was particularly noticeable the past season, where our customers everywhere reported that other fields alongside of our Lincoln Oats threshed out only 25 to 40 bushels per acre, when the "Lincoln," under the same conditions, returned 50 to 75 bushels.

Our fields here in Minnesota averaged this year 85 bushels per acre of clean seed oats, while many fields of our neighbors threshed out but 35 bushels to the acre of common sorts, grown under the same conditions as our "Lincoln." This we regard as the best and strongest testimony in favor of our Lincoln Oats, and our brother farmers, after considering it a little, will agree with us, because these field tests are conclusive proofs.

Having harvested such nice crops, we will make our prices low enough this year so all can afford to order enough so as to get into the seed, but it will pay to get a larger quantity at the low price we offer it and sow it for main crop.

Pk., 50c.; bu., \$1.10; 2½ bu. (or 1 sack), \$2.50; 5 bu., \$4.75; 10 bu., \$9.00; 20 bu., \$17.00.

WHITE RUSSIAN OATS.

When these Oats were first introduced they won favor at once, being very productive and as near rust-proof as any oat could be. Of late years the original stock has become badly mixed and run out through not being properly grown. By careful management we are able to offer the *White Russian* in its old-time purity, and those wishing to change their seed will make no mistake by getting our Minnesota-grown Seed Oats. The straw of the *White Russian* is remarkably stiff and strong; the heads are unusually long and heavily loaded with fine, white and heavy grains.

Pk., 35c.; bu., 80c.; 2½ bu., \$1.85; 5 bu., \$3.50.

WHITE SCHONEN OATS.

The *White Schonen* is an early oat, and immensely productive. During the past fifteen years they have continually come to the front as a big yielder at the experiment station of the University of Wisconsin. The straw is short and stiff and stands up well on rich ground. They have a fine large berry and a very

thin hull. Prof. W. A. Henry says of it in Bulletin 16: "For productivity, stiffness of straw and thinness of hull the *White Schonen* stands at the head of the list."

Pk., 40c.; bu., \$1.00; 2½ bu., \$2.25; 5 bu., \$4.25.

PROBSTEIER.

This variety originated in the Probstei, a part of Holstein noted for its superior quality of seed grain raised. It is remarkable for its vigorous and rapid growth; stools freely, the straw is strong and heavy and stands up better than many other well-known sorts. We can recommend it as a variety deserving more attention and to be cultivated more generally.

Pk., 35c.; bu., 90c.; 2½ bu., \$2.15; 5 bu., \$4.00.

The Lincoln Oats bought from you I sowed alongside of my own and they yielded 22 bu. more to the acre than my old oats, under same conditions. This pays, and nothing but Lincoln Oats will be sown on my farm hereafter.
Hartford, Wis. E. F. EISSNER.

Although a very unfavorable season last year, 1½ acres sowed with Lincoln Oats gave me 78 bu., about 20 bu. more to the acre than my old oats. Certainly I am satisfied.
Grand Mound, Ia.

JENS BOSSEN.

From one sack (2½ bu.) Lincoln Oats I threshed 70 bu. machine measure, which weighed out 93 bu. A very valuable oat and the best for main crop.
Monee, Ill.

L. ALBERS.

MANSHURY BARLEY.

The barley crop is a very important one, but of more importance is the kind or variety raised. Of all the varieties offered and introduced within the past years none have as yet excelled the old standard sort, the well-known

MANSHURY BARLEY.

We realized how important this crop is and secured some of the true and pure stock from Wisconsin, where it was first disseminated about ten years ago by Professor Henry of the Wisconsin State Agricultural College. We have grown it very successfully here in Minnesota, and this last year our crop was especially fine, the berry plump and large and of nice bright color. This is partly due to the fine weather we had in harvest time, and our brother farmers know how important this is with the barley crop.

The Manshury Barley is the best 6-rowed barley we ever grew; it ripens early and has strong, upright straw with long heads, filled with plump, heavy kernels. For malting it is the best barley known. It always yields well, and we threshed the past year 58 bu. per acre.

We wish to say right here to those of our brother farmers who wish to secure pure and fine seed of this grand barley, to order some of our seed this year, and at the low price we offer it all can certainly do so.

Price: Pk., 40c.; bu., \$1.10; 2½ bu., \$2.50; 5 bu., \$4.75.

Before you place your order for field seeds, please remember that we are seed growers and farmers and do not depend upon the open market for our seeds, as many so-called seedmen living in large cities have to do. Being extensive growers, we are able to make low prices on all kinds of seeds, while the quality of our seeds is unexcelled.

HIGHLAND CHIEF BARLEY.

HIGHLAND CHIEF BARLEY.

This new variety of 2-rowed barley originated here and was introduced a few years ago, when it excited more remarks than any other kind for its particularly fine appearance; besides this it is one of the most productive sorts, and of very high value for feeding and malting purposes, and ranks especially high in the latter respect. The Highland Chief is very robust and a vigorous grower, has strong, upright straw, with long heads. It is not as likely to be damaged by wet as most other kinds, as it is much more closely covered with broad awns or spikelets, consequently it is less liable to lose color by wet weather. It can also stand longer after being fit to cut. It is very productive and the kernels are very large; when compared with other varieties the size is immense. We can recommend the Highland Chief Barley to our brother farmers from our own experience, and when you order your seed of this from us you will be satisfied with it as well as the crop you raise from it. Price: Pk., 50c; bu., \$1.45; 2½ bu., \$3.50.

BLACK BARLEY.

Wonderfully productive and valuable for fattening or feeding purposes. Among the advantages that may be claimed for this new barley are, that it is a much surer crop than corn, especially in the Northwest; that it is exceedingly prolific, having yielded 180 bushels of shelled barley from two bushels of seed sown, a return of fifty-four fold, and that it is more nutritious than corn. Lb., 20c; 4 lbs., 90c; postpaid. Pk., 60c; bu., \$2.25.

SPRING RYE.

Very valuable as a catch-crop where winter grain has been killed out. Pk., 50c; bu., \$1.75.

JOHN'S RYE.—A variety of Spring Rye, particularly valuable on account of producing a heavy crop of green fodder the first, and a full crop of grain in the next year. In Europe it is sown in June or July, is then mown for green fodder in the fall and allowed to grow over winter and harvested the next year, when it yields a full crop of grain. Is but very little known here, but we would recommend a trial; sow about 80 to 40 lbs. per acre, as it always stools freely; it is well adapted to light, sandy soils. Lb., 25c; 4 lbs., 90c, postpaid. Pk., 55c; bu., \$3.25.

BUCKWHEAT.

NEW JAPANESE BUCKWHEAT.—This variety deserves at least a trial by every grower of Buckwheat. The straw is heavier and branches more, the kernels are at least double the size of any other sort, the flour made from it is equal in quality to that of any other buckwheat, yields enormously, ripens early and does not need to be sown very thickly. Lb., 25c; 4 lbs., \$1.00; postpaid. Pk., 50c; bu., \$1.40.

SILVER HULL.—A decided improvement on the old black sort, being earlier and much more productive. Pk., 50c, bu., \$1.40.

COMMON BUCKWHEAT.—Selected seed. Bu., \$1.25.

FLAX.

NEW RUSSIAN FLAX.—We raised a good crop of this here in Minnesota, and farmers wishing to change their seed will find this a very valuable variety. There is hardly a crop in this country more mixed with foul seed than flax, and it is surprising how intelligent farmers will deliberately sow such trash, when for a very little more money they can procure clean seed. Our extra-cleaned stock, pk., 50c; bu., \$1.85.

BELGIAN FLAX.—We would advise every grower of flax, either for the seed or fibre, or both, to try our Belgian seed. Authorities pronounce it by far the best variety for fibre, which is best proven by the fact that the straw from this Belgian Flax seed can be marketed at about three times the value of ordinary flax straw. Pk., 60c; bu., \$2.25.

FIELD BEANS.

The Navy Bean is considered the best for field culture, and we can supply a very high grade of this standard bean at about market prices. Pk., 75c; bu., \$2.60.

CALIFORNIA TREE BEAN.—For field culture, the most prolific variety yet known; grows 18 to 20 inches high, branching out in all directions and bearing its pods so high that they don't touch the ground, enabling it to stand a wet spell without injury, and all who have raised beans know that when the pods lay upon the ground but very little moisture will turn them black. They resemble the Navy somewhat, being rounded at the ends, very white, and cook in much less time than the Navy, and are of finer flavor. Try them, and for a field or main crop bean you will grow no other; 8 qts. will plant 1 acre. The average yield is very heavy; it is claimed that they yielded 116 bu. to the acre on small plots of ground. Pt., 8c; qt., 16c; pk., 90c; bu., \$3.20.

Spring Wheat.

The stock we offer has been carefully selected and is grown on our Minnesota Seed Farms, where we make a specialty in cultivating the best varieties.

Saskatchewan Fife.—There is no other variety which has attracted more attention and is better known the world over than the Saskatchewan Fife Spring Wheat.—Chas. A. Pillsbury, of the Pillsbury Flour Mills in Minneapolis, the largest in the world, making 7,500 barrels daily requiring 33,500 bushels of wheat, pronounces it the best and most valuable milling wheat in the world. It is known everywhere as the true No. 1, hard. It is unequalled for great productiveness, earliness, vigor and freedom from smut and all diseases. We pay particular attention to the cultivating and growing of this valuable milling wheat and confidently consider our strain the truest to be procured. It yielded with us 38 bu. per acre, in '91, and this year the yield was equally as good. Having a good stock of pure and true seed we wish every farmer to try it, and like everything else, offer it

at a very reasonable price. Lb., 20c.; 4 lbs., 75c., postpaid. By express or freight, peck, 35c.; bu., \$1.00; bag of 2½ bu., \$2.40; 10 bu., \$9.00. Bags included.

Velvet Chaff, or Blue Stem.—It is a bald, white chaff, and the chaff has a velvet-like surface, peculiarly distinct from other wheats. Also the stem, just below the head, when green, has a beautiful blue bloom on it, just similar to the bloom on a grape, and which can be removed by passing the finger over the stem. This bloom entirely disappears as the wheat ripens, and then the stem and straw assume a beautiful golden-yellow hue, and entirely free from rust. The wheat kernel is of the hard variety, quite similar to the renowned Scotch Fife, but much more productive, and equal to any spring wheat for milling. Lb., 20c.; 4 lbs., 75c., postpaid. By express or freight, peck, 35c.; bu., \$1.00; bag of 2½ bu., \$2.40; 10 bu., \$9.00. Bags included.

French Imperial.—This is best adapted to light soils of ordinary richness, fills out well, kernels are hard and plump, weighing from 62 to 64 lbs. per measured bushel. It has made remarkable yields even as far south as Texas. Lb., 25c.; 4 lbs., 80c., postpaid. By express or freight, peck, 70c.; bu., \$2.00.

MINNESOTA KING CORN

NORTHERN GROWN SEED CORN.

It is an indisputable fact that corn grown in the North will mature earlier than the same varieties grown in lower latitudes. Corn that will thoroughly ripen here in Minnesota and the Dakotas will always ripen earlier (no matter where planted), return larger crops, grow with more vigor and be superior in other ways to corn grown in other states. This point alone should make our seed corn cheap even if we asked double the price for it.

MINNESOTA KING CORN.

For several years we have sent this grand variety of corn to our customers and it has proven all we ever claimed for it. We regard it as the most valuable corn ever sent out. No matter what the season is, it will grow right along and make a crop during weather and under conditions that would ruin other varieties. There are varieties that, under exceptionally favorable circumstances, will yield as much, but year in and year out, through fat years and lean years, there is, we believe, no sort that will do as well as the **Minnesota King Corn**. For ability to endure extremes of heat and cold, or severe droughts, it has no equal. In appearance the Minnesota King is remarkably distinct, being a half-yellow Dent, the kernels are very broad, large and of a rich golden color. The ear is good-sized, 8-rowed and the cob small.

Price: By mail, postpaid, pkt., 5c.; 1 lb., 30c.; 3 lbs., 75c. By express or freight, pk., 60c.; $\frac{1}{2}$ bu., \$1.00; 1 bu., \$1.90; 2 bu., \$3.60.

EXTRA EARLY HURON DENT CORN.

better quality and give a heavier yield of oats in the Northwest simply because they will stand more drought and are especially adapted to the Northwestern climate. Being deep rooters they stand heavy drought.

Forman, N. D.

EXTRA EARLY HURON DENT CORN.

We found this to be the purest early Yellow Dent Corn that will ripen in localities where only Flint Corn has been considered safe to raise. It is the most valuable extra early corn ever introduced. The grain is of a bright orange color, stalk and ear good size, small red cob and long deep grains. 70 lbs. of ears made 63½ lbs. of shelled corn, leaving only 6½ lbs. for the cobs. For good-sized ears, grained over both ends of the cob, quick, rank and strong growth as well as early ripening and productiveness, it is the corn to plant, and we can recommend it to our brother farmers to plant, if only for a trial this year. Our price is so low that all can do it. Pk., 60c.; bu., \$1.70; 2 bu., \$3.30; 10 bu., \$15.00.

EARLY MASTODON DENT CORN.

We can recommend the Mastodon as being one of the best large-eared early corns in existence. It grows strong to a medium height, with broad, heavy leaves, and makes the finest shelled corn in appearance of any, being purely Dent, of two shades of white and yellow. It has the largest grain of any early Dent Corn. Being early, it can be used far north where many other varieties would not mature. It ripened in from 90 to 100 days, within 8 miles from Lake Erie.

By mail, postpaid, 1 pkg., 5c.; 1 lb., 30c.; 4 lbs., \$1.00. By freight or express, 1 pk., 75c.; 1 bu., \$2.00.

CHESTER COUNTY MAMMOTH CORN.

One of the best, largest growing and most prolific sorts of Yellow Dent Corn in cultivation. It will average, under good cultivation, 100 to 140 bushels of shelled corn per acre. The ears are very large, containing from 16 to 24 rows of good-sized deep grains; cob medium. It will mature in about 125 days. By mail, pkg., 5c.; 1 lb., 25c.; 4 lbs., 90c. By freight or express, pk., 60c.; bu., \$1.75.

Pride of the North; or Queen of the Prairie. It is remarkably productive, has yielded 100 bu. of shelled corn to the acre, ripening where nearly every other variety failed on account of the bad season. Will mature in about 90 to 100 days. Ears of a good size with 12 to 16 rows of very long kernels of a deep yellow color; cobs small. Pk., 55c.; bu., \$1.30.

Prices include good sacks, but not freight or express charges. Customers may select 1 or 2 quarts of any variety, to be sent along with other large orders, by cheap freight. Price, if sent that way, 15c. per quart, except on varieties where noted different.

All our seed corn is very carefully tested, and none sent out that we are not certain will grow well under proper conditions. We will mail samples to our customers for testing. One package each of any three varieties for 5c.; of any six varieties, 10c.

For Sweet and Pop Corn, see pages 46 and 47.

I consider the Lincoln Oats superior to any other variety I have ever grown or seen grown, in three respects: First, the Lincoln Oats will yield more to the amount of ground than any other oats that can be raised. Second, the Lincoln Oats will yield a better quality of oats than any other variety that can be grown in Wisconsin, Minnesota or the Dakotas. Third, the Lincoln Oats will yield a

L. H. PATTEN.

CHAMPION WHITE PEARL CORN.

tion of a great many farmers that Flint Corn will not succeed as well as Dent Corn, is entirely offset by the enormous yields of the **Rosebud**. In our experiments the yield of shelled corn averaged from 80 to 100 bushels per acre, and double the amount of good and nutritious fodder of the old varieties of Flint Corn. H. Halter, Racine Co., Wis., reports the average yield of 100 bushels per acre. One kernel will often produce three and four stalks, each stalk bearing from two to three ears, which are from 10 to 15 inches long, well filled and 8 to 12 rowed. The kernels are of a beautiful yellow color, with an increased reddish tint towards the point of the cob. In our Northern and Northwestern states the **Rosebud** will outyield all other varieties of Flint Corn.

By mail, postpaid, pkg., 5c.; 1 lb., 25c.; 3 lbs., 75c. By express or freight, qt., 20c.; pk., 75c.; bu., \$2.00; 2 bu., \$3.50.

SILVER-WHITE FLINT CORN.

An excellent variety, of good size and early maturity. Grain is of dusky white color. Pk., 75c.; bu., \$1.75.

LONGFELLOW FLINT CORN.

This is an 8-rowed Yellow Flint, the result of careful selection; ears from 10 to 15 inches long. The cob is small, the kernels large and broad. It is well adapted to the northwest, and is said to have produced 200 bushels of ears to the acre in Massachusetts. Pk., 70c.; bu., \$1.75.

FODDER CORN.

All stockraisers and dairymen know and appreciate the great value of Fodder Corn, and every farmer who has never before planted it should also try and arrange for planting one acre or so this year. A piece of land is best selected near the pasture, when it will come very handy to feed to the milch cows in case the pasture gets short. From $\frac{1}{2}$ to 2 bu. are needed per acre, and it can be planted in hills, drills or sown broadcast.

EVERGREEN SWEET FODDER CORN.

Dairy farmers of the Northwest realize the value of sweet corn for fodder, and every season the demand increases, for they have found that sweet corn has nearly double the value for fodder purposes over field sorts. We have a good stock of excellent **Evergreen Sweet Fodder Corn** and recommend it above all other varieties. All owners of cattle will find this a cheap and good crop to grow for feeding to stock during the summer months, helping out the shortness of summer feed and keeping up a supply of milk. Pk., 45c.; bu., \$1.45; bag of 2 bus., \$2.80.

RED COB ENSILAGE.

A variety very desirable for both fodder and ensilage and adapted to all sections of the country. It is sweet, tender and juicy, has an abundance of leaves and grows to a good height. Pk., 40c.; bu., \$1.25; bag of 2 bu., \$2.25; 10 bu., 11.50; bags included.

Mammoth Southern.—For ensilage or fodder, very desirable and largely grown in the Central States. A large white southern corn. Pk., 40c.; bu., \$1.25; bag of 2 bu., \$2.25; bags included.

CHAMPION WHITE PEARL CORN.

This popular corn originated in central Illinois, and the grower, in his description, states that it is a very pure White Dent Corn, maturing in from 90 to 100 days. The cobs are unusually small for the size of the corn and are almost white. The grain is extra long and white, is exceedingly heavy and very compact upon the cob. The stalk is short and thick, and roots very deeply, with ear growing low upon it, thus standing severe wind storms and droughts well. The Illinois Agricultural Station at Champaign, Ill., recommends it for general culture in Illinois, and our customers in Iowa, Nebraska and other neighboring states would do well to give it a trial.

Large pkg., 5c.; 1 lb., 25c.; 3 lbs., 75c., by mail, postpaid. By freight or express, pk., 70c.; $\frac{1}{2}$ bu.; \$1.10; 1 bu., \$2.00; 2 bu., \$3.80.

ROSEBUD FLINT CORN.

This unexcelled new variety of flint corn originated in northern Wisconsin. The assertion that it will not succeed as well as Dent Corn, is entirely offset by the enormous yields of the **Rosebud**. In our experiments the yield of shelled corn averaged from 80 to 100 bushels per acre, and double the amount of good and nutritious fodder of the old varieties of Flint Corn. H. Halter, Racine Co., Wis., reports the average yield of 100 bushels per acre. One kernel will often produce three and four stalks, each stalk bearing from two to three ears, which are from 10 to 15 inches long, well filled and 8 to 12 rowed. The kernels are of a beautiful yellow color, with an increased reddish tint towards the point of the cob. In our Northern and Northwestern states the **Rosebud** will outyield all other varieties of Flint Corn.

By mail, postpaid, pkg., 5c.; 1 lb., 25c.; 3 lbs., 75c. By express or freight, qt., 20c.; pk., 75c.; bu., \$2.00; 2 bu., \$3.50.

Mr. Otto Henke, Lincolnville, Kan., sowed 25 acres with our Clover-Grass Mixtures in the spring of 1892, and wrote us then on the 5th of November, 1892: "Sowed the Clover-Grass Mixture this spring on a piece of 25 acres, without grain, and secured a good catch and as nice a stand as could be desired. Have never before had such a fine stand, but I think it was because I sowed the grass with grain, but this will not do here with us, for when the grain is cut, the young and tender plants, being used to the shade, will soon dry up on account of the hot weather which we have about that time. This year the grass was high and strong enough to resist the heat. Will sow 10 acres more next spring and do not doubt the success with your Clover-Grass Mixture any more."

Mr. Henke wrote us then on December 12th, 1894, after the long and severe drought of that summer: "The Clover-Grass Mixture has done remarkably well this past very dry summer, and especially the Orchard Grass and Lucerne amongst it. At one time late in the summer it looked as if it was all dead, but after a little shower of rain it was alive and began to grow, when I let it grow up about 8 or 10 inches and then put my milch cows in; but this was a fine pasture at a time when everything else was dried up. I think I had the finest pasture here in Kansas. I think your Clover-Grass Mixture, with a good proportion of Lucerne or Alfalfa and Orchard Grass, is the best thing that can be sown here in Kansas."

(Please note our Special Clover-Grass Mixture, C. No. 9, on page 16; also, see page 11.)

Mr. C. F. Egeler, Leland, Mich., writes us on December 4th, 1894: "Sowed 200 lbs. of your Clover-Grass Mixture, C. No. 1, the last of April, with oats, which I sowed at the rate of 2½ bu. per acre first, and the grass seed at the rate of 20 lbs. to the acre afterwards, harrowed it lightly and then rolled the land. The grass came up fine and grew nicely up to the time when the oats were cut, when it began to get so hot and dry that I gave it up, because it looked as if everything was going to dry up. What was above the ground was all dry, but I was surprised after we had a light shower towards the end of September, when my grass began to get green, and is still so nice and green and shows such a nice stand that I think I will have a very large crop of hay next year from these 10 acres. The outlook for it at this time is very good. The Sainfoin or Esparsette sowed this spring also looked as if all dead and it seemed to be all gone, but now the stand is very satisfactory and the outlook good. Am I satisfied? I should say so; and remain, your friend,

C. EGELER.

Mr. G. A. Koelling, Westgate, Iowa, has sown several hundred pounds of our grass seeds and Clover-Grass Mixtures within the past two years, and writes us November 10th, 1894, about his success with his seeding that spring: "Sowed the grass seed this spring, with a light seeding of oats, on high black ground, which had been plowed the fall before. It came up nice and I have never before seen a finer stand. But soon the long and terrible drought set in; from the middle of May until the middle of August it did not rain at all, with one exception, and this was on the 11th of June, and if it had not been for this we would have had no crop at all. Of the grass seed, which was such a nice stand before, apparently all was dead and nothing could be seen but a few yellow leaves, all curled up and dry, on the ground. But as soon as we got a few showers in the fall, the grass and Alsike Clover and Lucerne began to grow, and now the outlook for a good stand next year is satisfactory. On another piece of about 2½ acres I sowed half Alsike and half Lucerne, with a light seeding of oats; this was partly corn and potato ground. On this piece I had the nicest oats, and now there is the best grass on it, lots of clover and Lucerne."

Mr. M. Lutje, Luverne, Minn., writes: "I sowed between 30 and 40 acres with your Clover-Grass Mixtures under wheat. After harvest we did not get any rain until very late in the fall, but the grass was about 4 inches high. If we should have had a good shower about the first of September I believe the grasses and clovers would have grown a foot high and covered the ground thoroughly."

Mr. J. T. Hovorka, Union Hill, Minn., secured a crop of oats and hay the same year from our Clover-Grass Mixtures. He says: "Sowed the Clover-Grass Mixture in the spring, with oats, and it came up nicely and grew so strong that it was above the oats in some places. After the oats were cut it began to grow again, and the stand was so thick and heavy that I mowed it and secured a fine crop of hay the same fall."

Mr. J. S. McBride, Burton, Mich., wrote us: "All grass seeds bought of you have done well, notwithstanding the extreme drought of last summer."

Mr. J. H. Rickels, Pomeroy, Iowa, writes us that he had a crop of grain and hay the same year, and says as follows: "I have sowed a good deal of land to grass already, but never before had such a fine stand as this time, when I sowed your Clover-Grass Mixture, part of it under oats, part under wheat. After harvest it grew fine and big enough to cut for hay. It seems as if every seed germinated and grew."

PLEASE READ, ALSO, PAGES 17 AND 18, AND PAGE 63.

Who wrote these letters? Our patrons. Such evidence of fair dealing is the secret of our ever-increasing business.

NORTHERN-GROWN SEED POTATOES.

Growing and introducing choice potatoes for seed is a very important business in our farming and seed growing. By carefully selecting our seed stock, planting only smooth, handsome and well-shaped potatoes, we established pure and hardy strains of the different kinds, and potatoes grown from such carefully selected seed here in the cold Northwest give satisfaction wherever planted. They will come up and grow strong and quickly and yield from a third to one-half more than other seed planted alongside of it. The value of our Minnesota-grown seed potatoes is fully worth \$1.00 to \$2.00 more per barrel in the states south of here than Southern-grown seed.

We acknowledge all orders for seed potatoes as soon as received and ship as soon as possible.

We can pack any three varieties our customers may select, at barrel prices, of each variety in one barrel or sacks, each variety separate. This enables all to thoroughly test a number of the best kinds and ascertain which is best adapted for their soil, climate and market.

Our barrels contain $2\frac{1}{4}$ bu., or 11 pks.; by weight, 165 lbs.

When we introduced our **Columbia 2** years ago, we said that it was the best main crop potato in this country. Since then we have had the two driest and most unfavorable seasons for growing potatoes that have been in very many years, but the **Columbia** has proven all we claimed for it. Our brother farmers will be best able to judge of the value of this grand potato when they know what it yielded with us within these past two very dry, unfavorable potato years. Two years ago it averaged 380 bu. and last year 270 bu. of fine, large potatoes per acre. To claim 1,000 bu. and more per acre, as some seedsmen do, is ridiculous; we just tell you what it does with us by a little careful farming, and you can and will have the same results. We claim, though, that our **Columbia Potato** is the strongest grower and biggest yielder ever offered, besides being very hardy, growing and producing a crop and resisting disease under most unfavorable circumstances and when other varieties fail. We want all of our brother farmers to get into the seed of this splendid main crop potato.

The tubers are smooth, nearly round, but flattened somewhat; eyes are few and shallow; skin is a creamy white color; flesh white, both raw and when cooked. In season it is medium late and a good keeper. Peck, 55c.; bu., \$1.75; bbl., \$4.45. By mail, postpaid, lb., 22c.; 3 lbs., 60c.

See page 38, Potato Eyes or Whole Potatoes by Mail.

EXTRA-EARLY OHIO SEED POTATOES.

Selected Minnesota-Grown Special Stock.

The demand for Early Ohio Potatoes is increasing every year. This popular variety being so well known it hardly needs any further description. Unfortunately, however, the stock planted by many farmers, as well as that sold by some seedsmen, is very badly mixed and run out through carelessness, and does not pay to plant. A few years ago we sent from our Chicago store a few bushels of an extra-fine stock of the purest Early Ohio Potatoes for planting here in Minnesota, and the crop from this splendid stock we offer now to our brother farmers. Those wishing to secure seed of the purest, earliest and handsomest Early Ohio Potatoes will do well to place their orders early with us, and we ship when all danger of frost is over. Pk., 55c.; bu., \$1.75; bbl., \$4.45. By mail, postpaid, lb., 22c.; 3 lbs., 60c.

Owing to the very severe drought the past summer the potato crop was cut very short and the growth kept back so that we thought best to make two grades of our Early Ohio Seed Potatoes, offering only the largest, handsomest and well-selected tubers in our Extra-Early Ohio Seed Potatoes as above, and another No. 1 grade besides. These No. 1 Early Ohios are grown here in Minnesota under the same conditions as our selected special stock, and are all pure and true to name; the only difference is they are not hand-picked and contain some small ones, but still they are better than most of the stock sold by other seedsmen. We offer these No. 1 Early Ohios at a less price for the reason that all may have a chance to secure the pure seed, true to name, at little cost. We know that other seedsmen would make no difference in price, but sell everything, assorted or not, at a high price. When you buy from the growers, this is not the case. Price of the No. 1 Early Ohios: Pk., 50c.; bu., \$1.65; bbl., \$4.15.

with fine netting. We put it on the market two years ago and during this time it has been the favorite potato with everyone who has raised it, and we therefore recommend it to all of our brother farmers. Peck, 60c.; bu., \$1.80; bbl., \$4.65. By mail, postpaid, lb., 22c.; 3 lbs., 60c.

brother farmers. Peck, 55c.; bu., \$1.65; bbl., \$4.45.

RURAL NEW YORKER, NO. 2.

Very distinct in appearance and will readily be distinguished among a hundred other varieties. This potato has steadily gained favor on account of its great and peculiar qualities. It will endure rich and heavy manuring without getting scabby, as most other varieties do, and produces immense crops, yielding from 350 to 400 bushels per acre. Although the tubers are large, they are not coarse and rough as most heavy croppers are. On the contrary, they are very smooth, of fine appearance, with few shallow eyes, in form oblong, inclined to round, skin and flesh are white and of unsurpassed quality, cooking dry and mealy. It is medium early and deserves more attention from our

MAGGIE MURPHY.

A new potato, introduced first in Rochester, and has proven itself to be one of the best. It is of the Rose class, large, well rounded, plump and as fine as silk. It is of fine quality, strong, vigorous growth, blight-proof, and an enormous yielder, having a record of 574 bu. to the acre in the field test. Peck, \$1.00; bu., \$3.00. By mail, postpaid, lb., 25c.; 3 lbs., 70c.

BEAUTY OF HEBRON.

This is a medium early potato of excellent quality and handsome appearance. It can safely be classified with the heaviest yielders. Its keeping qualities for an early kind are unexcelled; it will keep until late in spring.

Although it is an old variety, the stock that we offer has been kept to its original vitality and productiveness by careful selection of best shaped tubers for planting. Our stock cannot be compared with the common run-out and mixed Beauty of Hebrons generally offered. Peck, 55c.; bu., \$1.60; bbl., \$4.60.

SNOWFLAKE.

As a choice table variety, this potato takes the lead and is a great favorite with all. The tubers are of good size, white color, and are covered with a fine netting; the meat is pure white, and when cooked or baked is like snowflakes, and of the most delicious flavor. Many farmers object to growing this grand old potato for the reason that it will not yield enough. No wonder, for potatoes of choice qualities run out sooner than those with coarse grain, and ought to be replaced often by pure and healthy strains. We have this year the choicest and purest lot ever offered. Peck, 75c.; bu., \$1.80; bbl., \$4.90.

MANITOBA ROSE.

This is the genuine old Early Rose in its original vigor and purity. Being grown in the extreme northern climate of Manitoba, it cannot be compared with the old run-out variety, which is far gone and feeble. It yields heavy and is hard to beat. The tubers are smooth and not scabby as the old ones, and are of handsome appearance. What we mentioned of the other varieties, that healthy strains, wonderful productiveness and hardness are attained by growing choice selected tubers in the extreme north, applies to this Manitoba Rose. Yielded 413 bu. per acre in Canada. Peck, 65c.; bu., \$1.60; bbl., \$4.25.

NORTHERN VICTOR.

Two years ago we planted a small lot of this variety and it produced such remarkable results then and the past season, under very unfavorable conditions, that we consider it one of our best varieties. The tubers are of an oblong shape and grow very large; skin is creamy white, finely netted, flesh is pure white and fine-grained. Our stock is limited, but all who want to secure enough of this splendid potato to get into the seed, we would advise to do so and order early. $\frac{1}{2}$ pk., 40c.; 1 pk., 75c.; $\frac{1}{2}$ bu., \$1.15; 1 bu., \$1.95. By mail, postpaid, 1 lb., 25c.; 4 lbs., 85c.

THE FREEMAN POTATO.

Nearly everyone has heard of the Freeman, which originated here in Minnesota in 1889, and caused so much sensation. When first offered by a seedsman of Philadelphia, Pa., in 1891, it sold at \$3.00 per pound, and no one regretted the investment, which is the best proof of its good qualities. The tubers are oval in shape, russet in color, flesh very white (both raw and when cooked), very fine grain, and of very best flavor. From the time they are as large as hens' eggs until new potatoes come in the next year they burst open when boiled with their jackets on, and appear snow-white and floury. The Freeman is a remarkably good yielder; the reports in 1893 were averaging 200 to 300 bu. per acre. Owing to the very high price at which these potatoes have been sold so far, many were not able to secure them, but our price will enable all to secure enough so as to get into the seed.

Pk., \$1.00; $\frac{1}{2}$ bu., \$1.60; bu., \$2.80; bbl., \$6.00. By mail, postpaid, lb., 30c.; 4 lbs., \$1.00.

Potato Eyes or Whole Potatoes by Mail.—Within the past few years many seedsmen have adopted the plan of sending Potato Eyes by mail, devoting considerable space to this method, but it is not very practical. Within one week after the potatoes are cut they have lost a great share of their vitality, and, if obtained early in the season before planting time has arrived, those that have not been lost entirely up to that time will only make a feeble growth. We have therefore decided to send by mail medium-sized, sound, whole tubers; one pound of these will contain from 4 to 8 potatoes, with from 50 to 80 eyes, and these can be kept until planting time, and, when then cut to single eyes, these will have more flesh than the potato eyes usually sent by mail, and all the vitality, besides costing much less. In one pound of medium-sized tubers you get from 50 to 80 eyes, costing only from 20 to 30c., while 100 potato eyes cost \$1.00 or more, and they have not much flesh and vitality either. Note the difference. Many of our customers report the yields from single pounds at 30 to 62 lbs. of nice potatoes; anyone, therefore, ordering a pound, or 3 or 4 lbs., by mail, will soon get into the seed of one or the other splendid variety.

Changing Seed.—All experienced farmers know as well as we do, and have found it out, that it pays to change seed, and probably no other crop we raise is so much benefited by the introduction of fresh seed from time to time as potatoes. They seem to take on new life and prosper wonderfully, provided the change is to well-selected stock, and the farther north this is grown the better.

We know many market gardeners and farmers near Chicago, and others of our customers what grow potatoes largely, who will not plant their own potatoes they raised, but have bought their seed of us every year. They can grow nearly double the crop on the same land with our Minnesota-grown seed potatoes, than they can from seed of their own raising, and the tubers are smoother, handsomer and of better quality, and more salable in the markets.

We are continually planting and testing a great number of seedling and other varieties of potatoes on our trial grounds to ascertain their merits. Of these varieties we select the best ones and plant them more largely so as to be able to offer them in our catalogue. The **Polar Star**, of which we have harvested about 200 bu. the past summer, we can offer to our customers this year for the first time.

It is a **very early potato**, crowding our Early Minnesota and Early Ohio for earliness. In appearance and quality it is a beautiful potato, shape oblong, smooth, rose-colored skin, flesh white, dry and mealy and of the very finest flavor. It possesses not only all the good eating or table qualities required of any potato, but as far as earliness and productiveness are concerned it ranks equal with the very best varieties now planted. Early potatoes are the most profitable to plant for farmers and market gardeners depending upon large markets like Chicago, but early potatoes must also be productive, and as our **Polar Star** so far has yielded with us at the rate of 375 bu. in the very dry, unfavorable seasons, it is but fair to suppose that with a good season it will yield considerable more. It combines, therefore, good market qualities with the best table qualities and will become very popular. As stated above, our stock is but very limited this year, and we would advise all who wish to secure them to send their orders early. When once planted, your neighbors will want seed from you at your own price. We offer the **Polar Star** at the following reasonable prices as long as our limited stock holds out, and when it is exhausted we return the money. By mail, postpaid, 1 lb., 40c.; 4 lbs., \$1.25. By express or freight, $\frac{1}{2}$ pk., \$1.50; 1 pk., \$2.75; $\frac{1}{2}$ bu., \$3.50.

See page 38, "Potato Eyes or Whole Potatoes by Mail."

Our customers will bear in mind that when we offer a new potato it is a kind that possesses unusual merit, being of the best quality, as we have all and every chance to ascertain these points in our trial plantings.

Potato Seed.—Growing new sorts of potatoes from the seed is very interesting employment for old or young. A small package of seed will produce a number of seedlings differing greatly in shape, color and other general characteristics. The tubers rarely grow to be more than half an inch in diameter the first year, and after planting again the next year some idea can be had of their value. Some of our choicest and rarest varieties have been obtained in this way. The seed should be planted in fairly rich soil about corn-planting time, and the young plants kept clear of weeds and well cultivated. Pkt., 20c.

Of a small Columbia Potato which did not quite weigh half a pound, I harvested, to my greatest astonishment, 63 pounds of fine large potatoes. These potatoes grew under such unfavorable circumstances, as we had such a severe drought here, that I hardly expected anything from them. For this reason I did not pay more attention to these than to my common varieties. I noticed, however, the very vigorous growth of them. The result is the best one I ever obtained from a potato. The tubers are all very large and smooth, of the most uniform shape and of a fine appearance. In flavor it is equal to the renowned Snow Flake. I have tried all new varieties offered from year to year, within the last 15 years, but the Columbia beats them all in every respect.

—Arlington Heights, Ill.

F. H. GEHRKE.

POTATO COLLECTIONS.

In these collections we have some of the very best varieties, early and late, packed together, and by planting these collections all have a chance to ascertain which variety will do best on their soil, or is best adapted for the climate, or which suits the market best. This is of great value, and one sort or the other in these collections is certain to give better yields, or be better in other respects, than any you have now, and so will pay for itself many times.

COLLECTION NO. 1.

3 pks. Columbia..... }
4 " Early Ohio..... } 1 bbl., or 11 pks.,
4 " Rural New Yorker } for \$4.65.

COLLECTION NO. 2.

3 pks. Early Minnesota... }
4 " Manitoba Rose..... } 1 bbl., or 11 pks.,
4 " Northern Victor..... } for \$4.65.

SECOND-SIZED POTATOES.

We sort our potatoes carefully as to size and therefore have a limited stock of second-size potatoes. Owing to the long drought last summer there are more small ones than usual. These second-size potatoes are all right for planting, and preferred by some, because they go so much farther. Besides our No. 1 Early Ohios we have a limited quantity of second-size to offer. Please write us, stating the quantity and variety you wish to get, and if we can supply them yet, will write you the price.

P. S.—These second-size potatoes are all true to name of the varieties we send.

FREIGHT RATES ON POTATOES AND GRAIN.

Many of our customers would like to know what the freight would probably amount to, and according to the table printed below anybody can have an idea what a barrel will cost delivered. These rates are per 100 lbs. (Less than 100 lbs. cost the same as 100 lbs.)

For Illinois, Wisconsin, Iowa, Minnesota, Dakota, about.....25 to 50c.
" Nebraska, Kansas, Missouri, Indiana, Michigan, Ohio, about.....40 to 75c.
" New York, Pennsylvania and other Eastern states, about.....50 to 90c.
" Texas, Arkansas and other Southern states, about.....75c. to \$1.10.
" Washington, Oregon, California, about.....\$1.25 to \$2.25.

DOES IT PAY TO PLANT OUR MINNESOTA-GROWN SEED POTATOES?

Please read the following letters, of which we could get only a few on this page, and you will think it does. Our stock of seed potatoes is very fine this spring.

Mr. H. Koso, Falls City, Nebr., writes: "From one peck of each of your Early Minnesota and Columbia Potato I dug 6 bushels of each kind and they are as fine as any potato. For this very dry, unfavorable year this is remarkable."

Mr. John Helling, Linn, Kans., writes: "Potatoes bought from you have done well here. From 1 peck of Columbia I harvested 5 bushels very nice large tubers; the Manitoba Rose has done about as well."

Mr. D. A. Becker, Platte Co., Nebr., writes: "The finest lot of seed potatoes I have ever seen, I have received from you, and they have done very well here. From the 1 bbl. Early Ohio I could dig 35 bu. of very fine, smooth potatoes, while our home-grown stock of seed potatoes yielded next to nothing on account of hot weather and drought."

Mrs. A. Fletcher, of Allegheny Co., Pa., writes: "All seeds from you have done first-rate; the Early Ohio and Beauty of Hebron potatoes yielded enormously and all are well pleased with it."

Mr. M. Miller, Falls Co., Tex.: "Have never before received such nice potatoes, and in yielding qualities they beat everything; have also bought seed potatoes from a seedsman of Wisconsin and they were planted alongside of your potatoes, but from your seed I got four times as large a yield of nice and clean potatoes as from the others mentioned, which were scabby and rotten besides. I send you herewith the names of a few of my neighbors who would like to order seeds from you; please send them catalogues."

Mr. J. Schrader, Bremen, Ill., writes us: "Of the 1 lb. of Columbia Potatoes I had half a bushel of very fine and large potatoes. It is a very fine potato in quality and a big yielder."

M. Armleder, Georgetown, Ohio, writes: "Am well pleased with your seed potatoes, of which the Early Ohio and Early Minnesota are especially fine."

Mr. H. Roffmann, Worden, Ill., says: "You sent me 5 potatoes for a premium with my order, and from these I had a half bushel and they are as fine and nice potatoes as I have seen here."

Mr. Geo. Dannen, Van Cleve, Ia., writes: "Although it has been very dry here all summer and hardly any rain, the potatoes have done well. The Northern Victor, especially, is fine; I have tubers weighing $1\frac{1}{4}$ to $2\frac{1}{4}$ lbs. each."

Mr. H. E. Montag, Denny, Pa., says: "The Columbia is not only a fine potato but a good yielder as well. I planted 1 lb. and my neighbor the other $\frac{1}{2}$ lb. I got 28 lbs. very fine and nice potatoes; my neighbor in the same proportion."

Mr. J. Hopfinger, Tilden, Nebr., writes: "From 1 peck of your Early Ohio Potatoes I harvested 10 bushels, and they are the nicest potatoes in the market."

Mr. W. Donner, Norfolk, Nebr., writes: "From the 1 bu. of your Columbia Potatoes I got 18 bu.; the Early Minnesota, Early Ohio and others have done equally well."

OUR GENERAL LIST OF VEGETABLE SEEDS.

By looking through the first part of this catalogue you will notice that we give more attention to Field Seeds than any other seed house, and our stocks of Grass Seeds, Grain and Seed Potatoes are not only large and complete but of better quality than any offered by dealers, because they are grown by us here in Minnesota.

But in addition to our large and complete stock of Field Seeds, we have also as complete a stock of Garden Seeds as is carried by any house, only we do not devote so much space to them, simply making a general price list with very short descriptions, while others fill the space with exaggerated illustrations which often have to help sell inferior qualities of seeds.

By selecting their needs in Garden Seeds from our plain list, our customers can rest assured that they will receive the best grades of the varieties they select and at a less price than elsewhere. Shall we, therefore, not be favored with your orders for your Garden and Flower Seeds this year?

As far as room permitted we printed a few letters of the many we have received, within the past few years, from our customers, and we can assure all others who will intrust their orders to our care that they will be just as satisfied as these are if we fill their orders this spring.

Our Prices do not Include Postage except on Packages and Ounces.—For the convenience of our brother farmers who order bulk seed for the field, which of course is shipped by freight, and then select their garden and vegetable seed to be sent along also by cheap freight, we make this arrangement, and we are confident that many more will also take advantage of it. If seed from this list is ordered to be sent by mail in larger quantities than ounces, add for postage at the rate of 8c. per lb., 15c. per qt. or 8c. per pt. In comparing our prices with those who give prices prepaid by mail, it will be found that the postage and a good deal more is always added to the price, and the claim, "free by mail," amounts to nothing.

DWARF OR BUSH BEANS.

GREEN POD VARIETIES.

Extra Early Refugee Bean.—This is the earliest of the green-podded beans and has all the good qualities of the well-known Refugee and the additional advantage of being ready for the market and table at least 10 days earlier. It is an immense yielder and sure to produce a crop in either wet or cold seasons. Pkt., 3c.; pt., 12c.; qt., 20c.; pk., \$1.00.

Best of All.—A new variety which originated in Germany and has taken the lead in the South, and a bean that should be more extensively planted in our Northern states. Pods are about twice as long as of the Red Valentine, very fleshy, tender, stringless and of excellent flavor. One of the best or "Best of All" for market or family use. It is very productive. Pkt., 4c.; pt., 12c.; qt., 20c.; pk., \$1.25.

Early Valentine.—Early, productive, tender and of excellent flavor. Very desirable for either market or family use. Pkt., 3c.; pt., 8c.; qt., 16c.; pk., 90c.

Long Yellow Six Weeks.—Very productive, early, of good quality and a good shell bean. Pkt., 3c.; pt., 8c.; qt., 16c.; pk., 90c.

Early Mohawk.—Very early, hardy and productive. An old and reliable sort. Pkt., 3c.; pt., 8c.; qt., 16c.; pk., 85c.

White Kidney.—An excellent shell bean; the seeds are large and white. Pkt., 3c., pt., 10c.; qt., 20c.

White Marrow.—Very good as string or shell bean. Pkt., 3c.; pt., 8c.; qt., 16c.

California Tree Bean.—Valuable for field culture and the most productive variety known. The seeds are white, nearly round, cook very even and quick and are of fine flavor. Pkt., 3c.; pt., 8c.; qt., 16c.; pk., 90c.

White Navy.—Well known. Pkt., 3c.; pt., 8c.; qt., 16c.; pk., 80c.

Bush Lima.—Henderson's Bush Lima, well known, growing to a perfect bush about 18 inches high. Very early and productive. Pkt., 4c.; pt., 10c.; qt., 20c.

WAX POD VARIETIES.

Rust-Proof Golden Wax.—Very desirable and entirely rust-proof. It is always crisp, tender and of the most delicious flavor. Pkt., 4c.; pt., 10c.; qt., 20c.; pk., \$1.25.

Dwarf German Black Seed Wax or Butter Beans.—No doubt but this is one of the earliest of all the Wax varieties. Fine, early, stringless, and bears long, tender pods of a beautiful waxy-yellow color. Is one of the oldest wax varieties in cultivation, and well known and liked everywhere. Excellent for pickling. Pkt., 4c.; pt., 10c.; qt., 20c.; pk., \$1.25.

Wardwell's Kidney Wax.—Pods are very long, broad and of a rich golden color; very tender, entirely stringless and of excellent quality. Pkt., 4c.; pt., 10c.; qt., 20c.; pk., \$1.25.

White Seed Wax or Butter Beans.—Early, stringless, delicious yellow pods. Snap variety for both market and home use. Pkt., 4c.; pt., 10c.; qt., 20c.; pk., \$1.25.

Flageolot Wax.—Pods are very large and tender, a splendid variety for either market or home use. Very early and nearly always exempt from rust. Pkt., 4c.; pt., 10c.; qt., 20c.

Crystal White Wax.—Of quick growth; pods waxy white, nearly transparent, of fair size, stringless, very tender and good flavor, seeds white. Pkt., 4c.; pt., 10c.; qt., 20c.; pk., \$1.25.

Please remember that these prices do not include postage except on pkts. (see note above). If ordered separate to go by mail, then please add 8c. per pt. and 15c. per qt. for postage.

Note our low prices for pkts., where others will often charge 10c. for the same pkt., and our price on pts. and qts. is correspondingly low.

POLE BEANS.

Golden Cluster Pole Bean.—Our illustration, made from one of the plants, gives an idea of their wonderful yield, 2 or 3 pks being an average picking from a single vine. It bears its bright golden yellow pods in clusters of from 3 to 6 in the greatest abundance from July until cut down by the frost. Among many of the largest market gardeners it has taken the place of dwarf varieties as it will give a supply of string beans through the entire summer and produce many times the quantity of the dwarf varieties in the same space. The pods are 5 to 6 inches long, very rich, and of the finest flavor when cooked. The beans are pure white in color and make a fine shell or winter bean. Pkt., 5c.; pt., 15c.; qt., 28c.

Tall German Black Wax.—A very good snap sort, maturing in 70 days from germination. Also excellent for shell beans. Seeds are glossy black. Pkt., 4c.; pt., 15c.; qt., 25c.

Lazy Wife.—Very productive, pods 4 to 6 inches long, broad and fleshy, of a dark green color, and entirely stringless. The beans are pure white and excellent as winter shell beans. Pkt., 4c.; pt., 15c.; qt., 25c.

Dutch Case Knife.—An old reliable sort and very good as a shell bean. A splendid corn hill bean, planted 2 in a hill. Pkt., 3c.; pt., 12c.; qt., 20c.; pk., \$1.60.

Horticultural or Speckled Cranberry.—An old favorite and excellent as a snap or shell bean. Pkt., 3c.; pt., 12c.; qt., 25c.

Scarlet Runner.—Ornamental as well as useful; grows 8 to 10 feet high, producing clusters of beautiful scarlet flowers. Pkt., 5c.; pt., 15c.; qt., 25c.

Creaseback.—Very productive, early; pods are round, large, fleshy, and entirely stringless. The best green-podded Pole Bean for early use. Pkt., 3c.; pt., 12c.; qt., 20c.

King of the Garden Lima.—Pods are very long and contain 4 to 6 very large beans of excellent quality. Pkt., 4c.; pt., 15c.; qt., 28c.

Extra Early Lima.—Fully 10 days to 2 weeks earlier than any other Lima, and of excellent quality. Pkt., 4c.; pt., 15c.; qt., 28c.

If ordered separate, to go by mail, please add 8c. per pt. and 15c. per qt. for postage.

THE FINEST OF ALL
POLE BEANS

THE GOLDEN CLUSTER.

FIRST AND BEST.

This Standard Extra Early Pea is second to none in early maturity. The pods ripen so well together that nearly the whole crop can be taken at two pickings. Vines vigorous and hardy, about 2 feet high, pods long and well filled with peas of good size and good quality. It is very productive. Pkt., 3c.; pt., 8c.; qt., 16c.; pk., 95c.

EARLY PEAS.

MAUD S.—Of very strong and vigorous growth, about 30 inches high, with numerous and well-filled pods of good quality and very valuable for market. A very select strain of the First Earlies, and claimed by some to be the earliest pea in the world. Pkt., 3c.; pt., 8c.; qt., 16c.; pk., \$1.10.

ALASKA.—One of the earliest peas grown and a great favorite either for market or home use. Pods are of fine shape, dark green color and well filled. Vines stout, about 20 inches high. Peas blue. Pkt., 3c.; pt., 10c.; qt., 20c.; pk., \$1.15.

AMERICAN WONDER.—The earliest among the green wrinkled sorts, of dwarf and robust habit, growing only 9 to 12 inches high; very productive and fine flavored. Pkt., 4c.; pt., 12c.; qt., 22c.; pk., \$1.50.

PREMIUM GEM.—It needs no support, is very productive, wrinkled, very early, dwarf, and of excellent quality. Pkt., 3c.; pt., 8c.; qt., 16c.; pk., \$1.15.

TOM THUMB.—A great favorite with many on account of its dwarf habit, growing about 12 inches high. Pods are of good size, peas sweet and tender, wrinkled. It is very productive. Pkt., 3c.; pt., 8c.; qt., 16c.; pk., \$1.00.

BLUE PETER.—Very dwarf, about 12 inches high; peas are large, wrinkled, and of excellent quality. It is very productive. Pkt., 3c.; pt., 10c.; qt., 20c.; pk., \$1.25.

TELEPHONE.—A very strong-growing and productive sweet wrinkled sort; pods are very large, averaging 6 to 7 peas of the finest quality; is very popular amongst market gardeners; 48 inches high. Pkt., 3c.; pt., 12c.; qt., 20c.; pk., \$1.25.

PRIDE OF THE MARKET.—A new variety of robust, free-branching habit. It grows from 18 to 24 inches high and is covered from top to bottom with pods 5 to 7 inches long and well filled with large peas of very agreeable flavor. Pkt., 3c.; pt., 12c.; qt., 20c.

FOR GENERAL CROP AND LATE USE.

EVER BEARING.—Of very robust growth, about 2 feet high, forms as many as 10 branches from one root stock. Pods are 3 to 4 inches long, containing from 6 to 8 large wrinkled peas. It produces new blossoms after repeated pickings, continuing remarkable in bearing. Pkt., 3c.; pt., 10c.; qt., 20c.; pk., \$1.00.

STRATAGEM.—It is a very heavy cropper, and of excellent flavor. A dwarf sort about 24 inches high. Vines are of such strong growth as to need no support. Pkt., 3c.; pt., 10c.; qt., 20c.; pk., \$1.25.

YORKSHIRE HERO.—Very productive, pods large, round and well filled with peas of large size and excellent quality. A wrinkled standard sort, 20 inches high. Pkt., 3c.; pt., 10c.; qt., 20c.; pk., \$1.15.

WHITE MARROWFAT.—Pods large, round, light colored and well filled; very productive, 3 to 4 feet high. Pkt., 2c.; pt., 8c.; qt., 15c.; pk., 75c.

BLACK EYE MARROWFAT.—Very hardy and prolific, 3 to 4 feet high. Pkt., 2c.; pt., 8c.; qt., 15c.; pk., 70c.

TALL GRAY SUGAR.—Edible pods, and can be used like string beans, or shelled as preferred. Very tender and sweet, 40 to 50 inches high. Pkt., 3c.; pt., 15c.; qt., 25c.

DWARF GRAY SUGAR.—Edible pods, similar to above, growing 2 feet high. Pkt., 3c.; pt., 15c.; qt., 25c.

If peas or beans are ordered separate to go by mail, please remember and add 8c. per pt. and 15c. per qt. for postage. Note our low prices on Beans and Peas by the pt. and qt. or pk., and that they are grown here in the North.

Price List of Vegetable Seeds.

Our Prices do not include Postage, except on Packets and Ounces.—Many of our friends order their Seeds for the Garden to be sent along with other large quantities of Field Seeds by cheap freight—and as we believe it is more convenient to those who order their Seed to be sent by mail to add the amount for postage than it is to deduct it from prices given, therefore our prices quoted do not include Postage. Customers ordering Seeds from this list or Beans and Peas on the foregoing pages, to be sent separate by mail, will please add 8c. per pound; 8c. per pint, and 15c. per quart, to prepay the Postage.

We guarantee everything that anyone can, that our Seeds are of good vitality and prove of strong growth and satisfactory quality and purity, and that we will refill any portion of an order, free of charge, or refund the purchase money for anything that should through any defect in the Seed prove otherwise. All our Seeds have been tested and none are sold that are of poor or insufficient germination, but there are causes beyond human control on which the final success of a crop depends, so we cannot warrant any given result or hold ourselves responsible for the crop.

ARTICHOKE.

	Pkt.	Oz.	¼ lb.	Lb.
Large Green Globe—Produces large globular heads. The best....	5	30		
Jerusalem Artichoke.—See page 25.				

ASPARAGUS SEED.

Conover's Colossal.—A well-tried standard variety.....	3	10	20	40
Palmetto.—Very early, immensely productive. New.....	4	10	20	60

BEANS.—See pages 41 and 42.

TABLE BEETS.

If to go by mail add 8c. per lb. for postage.

Dewing's Early Blood Turnip.—Very early, and of good size.....	4	8	18	55
Improved Early Egyptian.—The finest early market sort, deep red, tender and sweet.....	4	8	18	55
Eclipse—Very early, smooth, globe-shaped, crimson color.....	3	7	17	50
Edmund's Early Blood Turnip.—Round, red, sweet and tender...	3	7	17	50
Lentz.—New, early, dark red, small top, tender and sweet.....	3	6	16	48
Long Smooth Dark Blood.—Very popular, a good winter sort....	3	6	16	45
Round Yellow.....	4	8	18	55
Swiss Chard.—Cultivated for its leaves, which are used like Spinach.	4	8	18	55
For Sugar Beets and Mangel Wurzel, see pages 24 and 25.				

BROCCOLI.

Large White.—Resembles Cauliflower, but is harder.....	7	25		
Purple Cape.—Heads compact, and of a purple color.....	7	25		

BRUSSEL'S SPROUTS.

Improved Dwarf.—A delicious vegetable. Try some of it.....	5	15	45	
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CABBAGE.

There is nothing the gardener raises that requires a more careful selection of seed for a profitable crop than the Cabbage. We handle no cheap seeds or those of doubtful quality, and our stock can be relied upon to be as represented. We suggest to plant for first early our "Minnesota's Earliest;" for second early, "Early Jersey Wakefield;" for late and main crop, "Luxemburger."

	Pkt.	Oz.	¼ lb.	Lb.
Minnesota's Earliest.—Will produce good-sized, marketable heads seventy days from sowing the seed. It is conical shaped and has but very few loose leaves.....	6	20	70	
Early Jersey Wakefield.—Standard sort. First-class stock.....	4	15	55	1 90
Extra Early Express.—A new French variety, tender and fine flavored.....	4	15	55	1 80

CABBAGE—Continued.

	Pkt.	Oz.	½ lb.	Lb.
All Head Early. —Early, large, tender, good keeper.....	5	20	60	2 25
Early Summer, Henderson's.—Double the size of Jersey Wakefield, about 10 days later.....	5	20	60	2 25
Vandergaw. —Very solid and uniform in size and shape.....	5	25	75	
Early Flat Dutch.....	3	15	45	1 75
Henderson's Succession.—About 1 week later than early summer, but of double the size.....	6	20	60	2 20
Filderkraut.—Heads large, conical, solid and of good quality.	4	15	50	1 75
All Seasons.—Is as good for late market or winter use as for early.....	3	15	50	1 75
Late or autumn and winter sorts.				
Luxemburger, or Hard Heading Cabbage. —Makes a very hard head of good size, and is remarkable for its keeping qualities, when buried over winter. It is one the most profitable sorts to grow.....	6	20	70	2 50
Short Stem Drumhead.—Heads very large, extra hard, solid, round, flattened on top, uniform in size and shape. Always a sure crop.....	4	20	70	2 50
Bridgeport Drumhead. —The standard late cabbage. It makes a large, round firm head, which seldom bursts or rots.....	6	20	70	2 50
Premium Flat Dutch.—The old reliable, standard variety. Select stock.....	3	12	40	1 50
Fottler's Improved Brunswick—With uniform, large solid heads.	4	15	55	1 75
Harvest Home. —The best late cabbage.....		25	75	2 75
100 Weight, New. —The largest known. Heads broad, large, 20 inches and more in diameter. Leaves pale green with white veins. Very hardy and productive. Best for field culture.....	6	25	75	2 75

RED CABBAGE.

Early Dark Red Erfurt.—The earliest and finest red.....	5	25	75	3 00
Red Drumhead.—The best for field culture, keeps well.....	5	25	60	2 25

SAVOY CABBAGE.

Improved American.—Best late Savoy. Makes solid, large heads, of excellent flavor.....	5	20	60	2 00
Early Dwarf Ulm.—Heads round, solid, leaves small, thick, fleshy, fine green color. One of the earliest and sweetest.....	5	20	60	2 00
Early Paris.—Heads are firm, solid, beautifully crimped.....	5	25	75	2 25

CAULIFLOWER.

Extra Early Dwarf Erfurt. —The best that can be had at any price and growers will find this a very superior strain. The heads are beautiful white, very large and firm, 8 to 10 inches across, of fine grain and form quickly. ¼ oz., 75c.....	15	2 75	10 00	
Henderson's Early Snowball.—In Henderson's sealed packages ¼ oz., \$1.00.....	25	4 00		
Extra Early Paris.—Good for forcing. Very early.....	10	75		

CARROT.

Ox Heart, or Guerande. —Grows rapidly, is thick, 5 to 6 in. long, short stump rooted and of a rich orange color. Very tender and of good flavor.....	4	10	30	90
Chantenay.—5 or 6 inches long, of deep orange color, tender, fine flavored.....	4	8	25	90
Half Long Danvers.—A favorite sort.....	3	8	20	75
Early Short Scarlet.—Short horn, stump rooted, 4 inches long.	3	8	20	75
Improved Long Orange.—Yields heavy and is of excellent quality.....	4	8	18	65
Long Scarlet Altringham.....	4	8	18	65
Nante's Early Half Long Scarlet.—Of very fine grain. For the Home garden.....	4	8	20	75
Half Long Scarlet Carentan.—Sweet and almost coreless.....	4	8	20	75
Long Red.....	4	8	18	65
Large Orange Belgian.—For stock. Read page 25 about it.....	3	7	13	50
Long White Belgian.—For stock. Read page 25 about it.....	3	7	16	50

CELERY.

	Pkt.	Oz.	¼ lb.	Lb.
Golden Self Blanching. —Without banking up, even the outer ribs become of a handsome, fresh yellowish white color. The heart is large, solid, of a rich golden yellow color.....	5	25	75	
White Plume. —Very tender, crisp, of good flavor, requires but very little labor in blanching.....	4	20	60	2 00
Chicago Dwarf Golden Heart. —The most reliable for main crop.	3	15	55	1 25
New Giant Pascal. —Stalks very large, thick, solid, crisp and of a rich nutty flavor. It blanches very easily.....	4	20	75	2 00
Kalamazoo. —Easily blanched, quality very good.....	5	25	75	
Boston Market. —Popular for home use, dwarf.....	3	15	55	1 25
New Rose. —Stems and heart a beautiful rose color; a good keeper.	5	25	75	2 50
Old Celery Seed, used for flavoring soups, pickles, etc.....		5		

CELERIAC.

Large Erfurt. —Roots large, smooth, of excellent flavor.	4	15	40	1 40
Apple Shaped. —Very smooth and round.....	4	15	40	1 40

CHICORY.

Large Rooted Magdeburgh. —Roots are dried in the fall and when required roasted and ground like coffee.....	4	10	25	75
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CORN SALAD OR FETTICUS.

Large Round Leaved. —The best variety.....	4	10	25	70
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CUCUMBER.

Chicago Pickling. —The best for pickles; is very early, of good uniform size and shape, dark green, crisp and tender. Very productive.....	4	8	20	70
New Siberian. —Early; valuable for forcing, very productive.	4	8	20	70
Early Frame. —Handsome, early, short, makes good pickles.	4	8	20	55
Boston Pickling or Green Prolific. —Very fine for pickles.....	3	7	15	50
West India Gherkin or Burr. —For pickling only; small prickly fruit.....	5	10	30	95
Improved White Spine. —Very fine, good size, skin deep green.	4	8	18	60
Extra Long White Spine or Evergreen. —Very smooth, 10 to 12 inches long; color deep green; crisp, tender and of delicious flavor.....	5	10	20	70
Improved Long Green. —Fruit 10 to 12 inches long, firm and crisp.....	5	10	25	75
Giant Pera. —Often 18 inches long, skin green, flesh white and tender.....	5	10	35	
Nichols' Medium Green. —Good for pickling and slicing.....	5	10	20	70
Giant White. —Fruit waxen white, flesh very solid, 15 to 18 inches long.....	5	25	75	
White Pearl. —Very productive, smooth, of white color.....	5	25	75	
Serpent or Snake. —A curiosity, grows often 6 feet long.....	5			

SWEET CORN.

If ordered by itself to go by mail please add at the rate of 10 cts. per quart for postage.
Please also note large packets of any variety only 3 cts.—Pints at quart rates.

	Pkt.	Qt.	Peck.	Bush.
Early Minnesota. —The standard early sweet corn.....	3	15	60	1 95
Early Cory. —Early; ready for use in 45 days from planting.	3	15	60	2 25
Crosby's Early. —Ears of good size, very fine flavor.....	3	15	75	2 25
Early Marblehead. —Eight-rowed, broad kernels and very sweet.	3	15	75	2 25
MEDIUM EARLY VARIETIES.				
Chicago Market. —A standard sort; very tender and sweet....	3	15	70	2 40
Black Mexican. —The sweetest; most desirable for family use.	3	20	85	3 00
Moore's Early Concord. —A favorite sort.....	3	15	70	2 25
Perry's Hybrid. —The best for second early.....	3	15	70	2 15
Ne Plus Ultra or Shoe Peg. —One of the best for private use..	3	20	25	
LATE VARIETIES.				
Stowell's Evergreen. —One of the most popular sorts.....	3	15	60	1 95
Gold Coin. —Very productive....	3	15	75	3 00
Potter's Excelsior. —A good, late sort.....	3	15	70	2 25
Late Mammoth Sugar. —Has large ears, sweet and tender.....	3	15	70	2 25

For Field and Fodder Corn, see pages 31, 32 and 33.

POP CORN.

"Pin" money for the boys if you try and raise some Pop Corn this year. It will pay.

~~As~~ If to go by mail, add to the price at the rate of 15c. per quart.

	Pkt.	Qt.	Pk.	Bush.
Illinois Snow Ball.—Very prolific; best for home gardening..	4	20		
Wisconsin 8-Rowed.—Grain is broad, smooth and pops out large.....	3	20		
Premium Pearl.—Very prolific, medium early, a fine popper.	3	20		
White Rice —Very fine white, kernels pointed	4	20		
Queen's Golden.—One of the best and most prolific, kernels yellow.....	5	30		

CRESS OR PEPPER GRASS.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
New Upland Cress.—When once established, needs no after care. Very early, can also be used in winter like Kale	3	20		
Curled Garden.....	3	8	18	55
Water Cress.—Grows in wet places. Used as a salad or raw..	5	40		

ENDIVE.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
Green Curled Summer.—Very fine market sort, for early use.	3	12	40	1 25
Green Curled Winter.—Tender green leaves, blanch white, hardy.....	3	12	40	1 25
Moss.—Very fine curled; tender, fine quality, ornamental.....	3	15	50	1 50
White Curled.	4	18	55	1 55

EGG PLANT.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
New York Improved Large Purple.—The leading market sort.	5	30	1 10	
Black Pekin.—Fruit round, solid, fine grained and delicious.	5	30	1 10	
Very Early Dwarf.—Similiar to the N. Y. Improved. Suited to the north.....	4	25	1 00	

GARLIC.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
The sets should be planted early in spring.....			15	40

GOURDS.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
Dish Cloth.—Lining and inner portion is sponge like, tough and elastic, is used for dish clothes.....	5	25		
Dipper Gourd.—Valuable for household purposes.....	5	25		
Sugar Trough.—Grows to hold from 4 to 10 gallons.....	5	20		
White Nest Egg.—Very ornamental, also useful for nest eggs.	5	20		

HORSERADISH.

Good sets by mail. Per doz., 40c.; per 100, \$2.00.

KALE OR BORECOLE.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
Dwarf Green Curled.—Very hardy and of excellent quality...	4	10	30	1 00
Tall Green Scotch.—One of the best sorts.....	3	10	30	1 00

KOHLRABI.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
Early White Vienna.—Good for market and table use. Tender.	4	20	60	1 95
Early Purple Vienna.—An excellent sort, good for forcing....	3	18	55	1 75
Early Erfurt.—Flesh white and very tender.....	5	20	60	2 00
Goliath Purple.—Very large and of good quality.....	5	25	75	2 50

LETTUCE.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
Black Seeded Simpson.—Forms a large loose head; leaves are large, thin, of good quality. One of the best sorts.....	3	8	25	90
Early Curled Simpson.—Does not head, more curled than the first.....	3	8	25	90
Chicago Forcing.—Of rapid growth, excellent flavor, crisp and tender.....	4	15	45	1 40

LETTUCE—Continued.

	Pkt.	Oz.	¼ lb.	Lb.
Early Curled Silesia.—Leaves bright green and very sweet....	4	10	30	90
Grand Rapids Forcing.—The best sort for shipping.....	5	18	50	1 40
Stubbornhead.—Forms a very solid head.....	4	12	30	95
Buttercup.—Very early, forms large solid heads with bright citron colored foliage; delicate flavor, crisp and tender.....	4	15	30	95
Black Seeded Tennisball.—Early, forms a close head, leaves crisp and tender.....	4	10	30	1 00
White Seeded Tennisball.—A fine early sort.....	3	8	28	85
Sunset or Blonde Blockhead.—New. Forms large solid heads of a rich golden yellow, of splendid quality; a good keeper.....	5	18	50	1 25
Improved Hanson.—Forms very large, firm heads; crisp and tender.....	4	10	30	90

LEEK.

Broad Scotch or London Flag.—Large with broad leaves.....	4	10	30	1 00
Large Musselburgh.—Of enormous size and mild, pleasant flavor.	4	12	40	1 50

MUSK MELONS.

If ordered by mail, add 8c. per pound, for postage.

Chicago Market.—Very early; large, of uniform size, thickly netted skin, small seed cavity, deep green flesh, juicy and of delicious flavor. Very popular in the Chicago market.....	4	8	22	75
The Osage.—Skin dark green, slightly netted, flesh very thick, of a rich salmon color, medium size, egg shape. One of the best.	4	8	20	70
Winter Pine Apple.—Skin deeply corrugated and when ripe of a rich yellow; almost solid flesh. A wonderful keeper. If picked before frost, and laid away in a dry cellar, they will keep for months, until the holidays, or into mid-winter.....	5	15	45	
Extra Early Hackensack.—2 weeks earlier than the Hackensack.....	4	8	22	75
Early Nutmeg.—Green fleshed; rich and sugary.....	4	8	20	60
Early Netted Gem.—The best for market. Light green, thick flesh, of good flavor.....	3	7	18	60
Casaba.—Flesh very thick, light green and fine flavor.....	3	7	18	60
Delmonico.—Oval shaped, finely netted, flesh orange pink, delicious flavor.....	5	10	25	80
Emerald Gem.—Very thick salmon colored flesh.....	4	8	20	70
Improved Christiana.—Flesh rich yellow, of delicious flavor.	4	8	20	70
Bird Canteloupe.—Flesh light green, of fine quality. Often weighs 22 lbs.....	4	8	20	70
Jenny Lind.—Small, very early, flesh green, excellent flavor.	3	7	18	65
Green Citron.—Medium size, flesh green and of fine flavor....	3	7	20	70
Miller's Cream.—Flesh of a rich salmon color, very thick....	3	7	20	70
Baltimore.—Flesh thick, light green, and of good flavor.....	3	7	20	65
Bay View.—One of the largest; light green flesh, very thick and sweet; very productive.....	4	8	20	70

WATERMELONS.

Add 8c. per pound, for postage, when ordered separate.

Ruby Gold.—Its beauty and quality are unexcelled; it is one of the juiciest and finest watermelons ever raised; averages 40 to 50 lbs. in weight.....	5	20	50	
The Jones or Jumbo.—New. The skin is green; the meat deep red, sweet, juicy and melting; very large, nearly round, frequently weighing 80 lbs. each.....	5	20		
Kentucky Wonder.—One of the best for home use or market. Oblong in shape, often weighing 40 to 60 lbs. Skin dark green; flesh firm, solid and never mealy; very fine sugary flavor.	4	10	25	90
Kolb's Gem.—Nearly round, rind dark green, flesh red, weight 25 to 50 lbs.....	3	8	18	65
Dixie.—Most productive, finest eating, best shipper ever introduced.....	3	8	18	65
Seminole.—Very large, early and prolific, oblong shape; flesh brilliant carmine, very solid, of a rich melting flavor; a good one.	3	8	18	70
Mountain Sweet.—Early, solid, large, sweet and delicious....	4	8	18	70

WATERMELONS—Continued.

	Pkt.	Oz.	¼ lb.	Lb.
Hungarian Honey. —Early, flesh red and of a very rich honey flavor.....	4	8	25	85
Black Spanish. —Large, round, sweet, scarlet flesh, black seed.	4	8	20	65
The Boss —Early, oblong; flesh deep scarlet of rich flavor....	3	7	18	60
Dark Icing. —Round, solid, medium size, delicious flavor.....	4	8	20	65
Mammoth Ironclad. —Oblong, flesh red, fine flavor, 50 to 70 lbs. each.....	4	8	20	65
Cuban Queen. —Flesh red, solid, very sweet; early and productive.....	4	8	20	65
Colorado Preserving Melon. —Flesh is firm and makes preserves of the finest flavor, clear, nearly transparent.....	4	10	25	85
Pride of Georgia. —Very large, nearly oval, crisp and sweet.	3	7	18	60
Peerless or Ice Cream. —Green skin; very sweet, melting flesh.	4	8	18	60
Phinney's Early Oblong —Bright red meat and very sweet...	3	8	18	55
Green and gold. —Flesh is a rich golden color, of fine quality, ripens early, productive, weight 30 to 40 lbs.....	4	10	25	85
Citron. —For preserves, flesh white and solid, seeds red.....	4	12		

MARTYNIA.

The seed pods make fine pickles when used when sweet and tender.....	4	20		
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MUSHROOM SPAWN.

French Spawn , loose, by mail, prepaid.....				50
English Spawn Bricks , 1 lb. each, prepaid.....				35

MUSTARD.

White. —Grown for salads.....	4	8	12	36
Brown or Black.	3	7	10	30
New Chinese. —Large leaves, flavor sweet and pungent.....	4	8	25	80

NASTURTIUM.—Indian Cress.

Tall. —The seeds, while young, are used for pickles.....	3	8	24	80
Dwarf. —Beautiful colored flowers.....	4	10	30	95

OKRA OR GUMBO.

Dwarf Green. —The pods, when young, are used in soups....	4	8	26	
Long Green. —A tall, late variety.....	3	7	22	
White Velvet. —Pods are round, large smooth, never prickly.	4	8	26	

ONION SETS.

These furnish large onions early, as well as the first green onions for table use. Plant sets early in spring in shallow drills one foot apart and 4 inches between sets.

Prices do not include postage. If ordered by mail add 10c. per quart and 5c. per pint for postage.

	Pt.	Qt.	Pk.	Bush.
White Multiplier. —The largest of the sets if allowed to grow through the summer make an onion of fair size which divides when ripening in the fall, multiplying liberally for another year, each set making from 10 to 20 small onions. They are very early	10	18	1	35
Yellow Bottom Sets.	8	16	1	10
Red Bottom Sets.	8	16	1	10
White Bottom Sets.	10	18	1	10
Red Top Sets or Buttons. —For early onions.....	8	16	1	10
White Top Onion Sets. —New. The onions are ready very quickly for table use and the matured bulbs are very sweet and mild. It is the finest, earliest and best onion. Stock limited...	30	55		
Winter Onions, Egyptian or Perennial. —When once set out, they come up year after year.....	8	16		
Potato Onion. —Valuable for an early crop, mild and sweet flavor.....	10	20		
Shallots.	2	16

CROP OF 1894 ONION SEED.

By looking at our prices on the foregoing and following pages our customers will recognize that we made them lower than ever before and still lower than seeds of no better but often inferior quality are sold by other dealers. Our aim is to carry these low prices through every department in our catalogue.

Everybody knows that the crop of onion seed was cut very short by the great drought last summer, and our this year's prices will therefore seem a little higher, but really they are not high when you bear in mind that we do not have any old or cheap California, Oregon or European onion seed to offer, but new seed, grown here in Minnesota. This seed is worth double the price of the other seed mentioned above. Only on account of the great shortage in our crop, we are obliged to ask about the same price as last year, but hope that we may be able, with a favorable season, to make the lowest price ever offered, in our next catalogue.

Yellow Globe Danvers.—The standard and most popular onion everywhere. It ripens early, keeps well and is an excellent shipper; sells readily in every market. Our seed of this popular onion is of the best quality and cannot fail to please. Pkt., 4c.; oz., 12c.; $\frac{1}{4}$ lb., 42c.; 1 lb., \$1.48.

Large Red Wethersfield.—A favorite and the standard red onion; planted largely, is a sure cropper, enormous yielder and remarkable keeper. Pkt., 4c.; oz., 14c.; $\frac{1}{4}$ lb., 46c.; 1 lb., \$1.65.

Early Red Globe.—This is an improvement over the Southport Red Globe, possessing all the good features of the latter but being fully two weeks earlier. Pkt., 4c.; oz., 10c.; $\frac{1}{4}$ lb., 38c.; 1 lb., \$1.40.

White Globe.—One of the handsomest onions, being not only large in size, handsome in form and of fine, mild flavor, but the best keeper of the white varieties. Pkt., 4c.; oz., 18c.; $\frac{1}{4}$ lb., 60c.; 1 lb., \$2.10.

Through an accident at the time of harvesting, some of the seed of the Yellow Globe Danvers and Large Red Wethersfield was mixed, and this mixed seed is of about $\frac{3}{4}$ Red Wethersfield and

$\frac{1}{4}$ Yellow Globe Danvers. Now this is as good seed as of the varieties described above, and the onions can be easily separated when they are harvested, but we will make the price very low, having about 100 lbs. of it. Pkt., 3c.; oz., 8c.; $\frac{1}{4}$ lb., 30c.; 1 lb., 90c.

YELLOW FLAT DANVERS.—Different from the Globe Danvers in shape only, being more flat. Very productive. Pkt., 4 cts.; oz., 10 cts.; $\frac{1}{4}$ lb., 45 cts.; lb., \$1.50.

EXTRA EARLY RED FLAT.—Light red in color; rapid grower and good keeper. Best where seasons are short. Pkt., 5 cts.; oz., 20 cts.; $\frac{1}{4}$ lb., 50 cts.; lb., \$1.70.

YELLOW STRASBURG.—Later and more flat than the Danvers. Very productive and a favorite sort for sets. Pkt., 3 cts.; oz., 10 cts.; $\frac{1}{4}$ lb., 35 cts.; lb., \$1.30.

They are very popular, owing to their mild flavor. They grow rapidly, some sorts growing onions from seed the first year weighing 2 to 4 lbs. each. They succeed well everywhere, but are particularly adapted to Southern States.

WHITE QUEEN—A silver skinned variety of quick growth and remarkable keeping qualities. If sown in early spring, it will produce onions 1 to 2 inches in diameter early in summer, and if sown in July will, with favorable weather, be ready to pull late in autumn and be sound and fit for use until the following summer. Much used for pickling, as it is of fine flavor. Pkt. 5 cts.; oz. 20 cts.; $\frac{1}{4}$ lb. 55 cts.; lb. \$2.00.

BERMUDA ONIONS.

These onions grow to an immense size and are of beautiful form. The skin is very thin, flesh white, fine grained, of mild and pleasant flavor. Onions weighing 1 to $1\frac{1}{2}$ lbs. will grow from seed the first year, but to obtain the full size the bulbs should be set out the following spring.

Either white or red Bermuda each, per pkt. 5 cts.; oz. 20 cts.; $\frac{1}{4}$ lb. 55 cts.; lb. \$2.00.

All the Vegetable Seeds, for which I sent you a large order last spring, did excellently, and I will remember your firm again when ordering.

A. L. BYRD, Canadian Co., O. T.

All the Garden Seeds sent by you have done very well, Vegetable as well as Flower Seeds, and I must admit that hardly ever have I been so well treated by any other seed house than you deal with your customers. The Planet, Jr., Garden Tools also do better work than expected.

Beaufort, Mo.

REV. A. W. MUELLER.

All those who have planted your seeds here last spring were very well satisfied, and we will all order from you again and try our best to induce others to do the same. It affords anyone great pleasure to deal with a firm like yours.

REV. L. J. F. GOING, Edgerton, O.

WHITE PORTUGAL OR SILVER SKIN.—Popular on account of its earliness and mild flavor. Is largely used for growing sets and pickles, but it will produce fine onions the first year from seed. Pkt. 5 cts.; oz. 20 cts.; $\frac{1}{4}$ lb. 65 cts.; lb. \$2.45.

EXTRA EARLY PEARL.—Very early, large, handsome, of fine waxy white color; flesh white and of delicious flavor. Grows very rapidly and to good size, reaching the first season from seed the enormous weight of 2 to 4 lbs. each. Pkt. 5 cts.; oz. 20 cts.; $\frac{1}{4}$ lb. 70 cts.; lb. \$2.50.

THE BEST PICKLING ONION.

EXTRA EARLY BARLETTA.—They are of a pure paper white color, very mild and delicate in flavor, from 1 to $1\frac{1}{2}$ inches in diameter and $\frac{1}{4}$ of an inch in thickness. Both for table use and for pickling it is most valuable. Its extreme rapidity of growth will astonish every one who raises it for the first time, and its earliness will recommend its use as a substitute for onion sets. Pkt. 4 cts.; oz. 16 cts.; $\frac{1}{4}$ lb. 55 cts.; lb. \$2.00.

Never before did we have such a nice Garden than this spring when we planted your superior Garden seed. Everything was so nice and everybody around here says that they never saw anything like it, and we will all order our seeds from you from now on.

Madison, Neb.

A. CHRISTIANSEN.

ITALIAN ONIONS.

GIANT ROCCA.—An immense onion. Globular in form, skin light brown, flesh mild and tender. It will produce a large onion from seed the first season, but to attain the largest growth, very small sets or bulbs should be put out the second spring, when they will continue increasing in size instead of producing seed, as is the case with American onions. Pkt. 5 cts.; oz. 20 cts.; $\frac{1}{4}$ lb. 55 cts.; lb. \$1.90.

For "Mammoth Silver King" and "Prize-taker" see description and illustration on next page.

SILVER KING — Two Very Good Onions. — PRIZE-TAKER

MAMMOTH SILVER KING.

In appearance this is the most striking onion grown. We hardly know which to commend the most, its large size, symmetrical appearance and beautiful silvery flesh, or its sweetness, tenderness, and mild flavor. So sweet and tender is the flesh that it can be eaten raw, like an apple. The average diameter of the onions is from 5 to $7\frac{1}{2}$ inches, thus making the circumference from 16 to 22 inches; single bulbs weighing from 2½ to 5 lbs. each. No other variety attains such mammoth size. These qualities make it not only the best for exhibition and fancy high priced trade, but for the home table it is unsurpassed. It matures early, being one of the earliest Italian sorts.

Pkt., 6c.; 3 pkts., 16c.; oz., 20c.; $\frac{1}{4}$ lb., 65c.; 1 lb., \$2.00.

PRIZE-TAKER.

This onion is very closely related to the Spanish King, but is really an improvement on that favorite sort, owing to its careful selection and growth in this country. Its cultivation here has resulted in such increased size and greater solidity as really to entitle it to be classed as a new variety. It is perfectly globe shaped with bright straw colored skin; the necks are very small and the onions always ripen up hard. It is an excellent keeper of exceedingly fine flavor, and grows to an enormous size, onions weighing five lbs. having been grown from seed the first year.

Pkt., 6c.; 3 pkts., 16c.; oz., 20c.; $\frac{1}{4}$ lb., 70c.; 1 lb., \$2.15.

One packet each of these two great Onions for 10c.

Bulbs, weighing from 2 to 5 pounds, can be raised from the black seed the first year. Packet of either, 6c.; 2 packets, one of each, 10c.

PARSLEY.

If to go by mail add 8 cts. per pound, for postage.

	Pkt.	Oz.	¼ lb.	Lb.
Champion Moss Curled.—Leaves beautifully curled.....	4	8	25	80
Double Curled.—Dwarf, finely curled.....	4	8	20	65
Fern Leaved.—For garnishing or table decoration.....	4	8	25	85
Plain or Single.—Larger and stronger flavored.....	3	7	18	55
Hamburg Rooted.—The roots are used in soups, giving them a fine delicate flavor.....	4	8	25	85

PARSNIPS.

Improved Guernsey.—Roots very smooth, flesh fine grained, of good quality; a heavy cropper.....	4	8	18	60
Hollow Crown or Long Smooth.—Roots smooth, large, very tender and sugary.....	4	8	18	55
Maltese.—Long, smooth and white, fine flavor.....	3	8	18	55
Student.—Half long, smooth and sweet.....	4	8	18	55

PEAS.—See Page 30.**PEPPER.**

Ruby King.—Mild flavored, 5 or 6 in. long and 3 to 4 in. thick; of a bright, ruby red color, when ripe.....	4	20	70	2 60
Sweet Mountain.—Very large, early, sweet and mild.....	4	20	70	2 60
Large Bell or Bull Nose.—Very early, large, glossy red, mild.....	4	20	70	2 50
Cardinal.—New. Flesh thick, sweet, tender; brilliant red....	4	25		
Red Cluster.—Fruit thin; grows in bunches, very hot in flavor.....	4	25	1 00	
Cherry Red.—Fruit small, red, round and very hot.....	4	25	75	
Cayenne Long Red.—Used for commercial purposes.....	4	25	75	
Golden Dawn.—Of delicate flavor and a rich golden color....	4	25	75	

PUMPKIN.

Quaker Pie.—Oval shaped; of a creamy color inside and out; flesh is fine grained and rich flavored, makes superior pies; is an excellent keeper.....	4	10	30	1 00
Calhoun.—A new pie pumpkin, medium size, very solid. Outside is cream color, flesh a rich salmon or orange, thick and fine grained; very productive. The best for pies.....	4	15	50	
Sugar.—Fine grained, sweet, keeps well. Good for the table.....	3	8	18	60
Large Cheese.—Thick yellow flesh, fine grained; of excellent flavor.....	3	7	16	55
Cushaw.—Skin white, flesh golden yellow, fine flavor.....	4	8	18	60
Mammoth Tours.—Very productive and of enormous size; flesh thick and sugary, fine for table use.....	4	10	30	85
Connecticut Field.—The best for field culture, can be grown with corn. Good for stock for winter feeding.....	2	6	10	35
Mammoth Prize (the Big Show Pumpkin).—If you wish to astonish your neighbor or have the "biggest pumpkin" at your Fair. You will "get there," if you include one packet of this in your order for other seeds. It will weigh from 200 to 300 lbs....	6	10	35	
Jonathan.—New. A splendid keeper; good for cooking.....	4	10	25	85
Negro or Black Sugar.—One of the best for pumpkin pie. Skin almost black, flesh a rich orange; a good keeper.....	5	15	40	
Red Mammoth Etampes.—Skin smooth, bright glossy red; meat thick and rich; of immense size.....	4	10	35	1 25

RHUBARB OR PIE PLANT.

Linnaeus.—Early, large, tender and free from the stringy skin.....	4	10	30	
Victoria.—Very large and tender.....	3	8	25	

RADISHES.

1 oz. for 100 feet of drill. 9 to 10 lbs. for an acre in drills. If ordered by mail, add 8c. per pound, for postage.

EARLY RADISHES.

Early Scarlet Globe, White Tip.—Very attractive, being of bright scarlet color with a white tip. Of very quick growth....	4	8	20	60
Early Scarlet Globe.—Round, about 1 inch in diameter, flesh white.....	3	6	16	50

RADISHES—Continued.

	Pkt.	Oz.	$\frac{1}{4}$ lb.	Lb.
Extra Early Carmine.—Only needs 20 to 22 days to mature, of a rich carmine color, good for forcing; crisp and fine flavored...	4	8	18	60
Early Deep Scarlet Turnip.—Smooth, short top and very fine.	4	8	18	55
Early White Turnip.—Flesh and skin pure white, tender and crisp.	4	8	18	
Early Long Scarlet, Short Top.—The best sort for private gardens or market use. Root averages 9 inches long, smooth; of a rich scarlet color, very crisp; a quick grower.	4	8	18	56
Long Scarlet, White Tipped or Cardinal Radish.—A new sort, very early, fit for use in 25 days after sowing. Is the most attractive long sort, of the brightest scarlet, the tails tipped white.	5	10	30	1 15
Olive Shaped White.—Flesh white, tender and of excellent flavor.	4	8	18	55
Olive Shaped Scarlet.—Skin scarlet, flesh pink and very tender.	3	7	16	50
French Breakfast.—Medium sized, olive shaped, crisp and tender.	3	7	16	50

SUMMER RADISHES.

Improved Chartier.—Very distinct; color scarlet at top, shading to pink at center, white at the tip; very crisp and pleasant flavored; remains a long time without becoming pithy and unfit for use.	4	8	18	58
Lady Finger or White Vienna.—Both skin and flesh are pure snow white, crisp and brittle; of rapid growth.	4	8	20	65
Giant White Stuttgart.—Flesh white, firm, brittle, of good flavor.	4	8	20	60
New White Strassburg.—Grows rapidly, flesh firm, brittle and tender.	4	8	20	60
Yellow Summer Turnip.—Large size; both skin and flesh are a golden color; fine quality, firm; never gets pithy.	4	8	18	55
Mixed Seed.—Desirable for family use; early and late varieties can be used as they mature.	2	7	16	

WINTER RADISHES.

Chinese Rose, or Scarlet China.—Flesh firm, crisp, fine flavored, good quality, medium size. One of the best Winter Radishes.	4	8	18	68
Round Black Spanish.—Good sized, solid, flesh white, appetizing flavor.	4	8	18	60
Long Black Spanish.—Large, black skin, white and firm flesh, good flavor.	4	8	18	60
California Mammoth.—Flesh white, solid, tender; of good flavor.	4	8	20	75

SALSIFY OR VEGETABLE OYSTER.

Long White.—The standard variety.	4	8	30	95
Mammoth Sandwich Island.—Very large, white, tender and delicious.	4	10	35	1 00
Scorzonera, or Black Salsify.—Some prefer it to the white.	4	10	35	

SPINACH.

Bloomsdale.—Large, thick leaves, curled like Sayoy Cabbage; good for winter.	3	7	12	22
Round Leaf.—One of the best market sorts; for spring and fall sowing.	2	6	10	20
Long Standing.—Will stand a long time before running to seed.	3	7	12	22
Prickly Seeded.—Very hardy; good for fall sowing.	3	6	10	20
New Zealand.—Stands heat and drought better than the other varieties. Planted in May, it will yield a supply of leaves all summer.	4	8	16	

SQUASH.

Hubbard.—A great favorite and more grown for market than any other sort. Good size, dark green, flesh yellow, fine grained, dry and sweet. We have a choice strain.	4	8	16	65
Butman.—Fine grained, thick flesh, sweet and of delicate flavor.	4	8	16	60

SQUASH—Continued.

	Pkt.	Oz.	¼ lb.	Lb.
Chicago Orange Marrow.—Earlier than any other long keeping sort. Skin orange, flesh very thick, orange color, fine grained and of excellent quality, cooks dry. Is in season from September to January.	4	8	16	60
Bay State.—Very thick and solid flesh, bright yellow, dry, flavor sweet.	4	8	18	70
Marblehead.—Similar to the Hubbard, keeps well, very solid and heavy.	4	8	16	60
Illinois Beauty.—New, distinct and showy in appearance, one or both ends being a deep green color, while the center band is a rich deep orange. Average size 12 to 14 inches long, 4 to 5 inches in diameter; very thick meat, having almost no seed cavity.	4	8		
Pike's Peak, or Sibley.—One of the very best keepers and shippers.	3	7	16	60
Mammoth Chili.—The "Big Show Squash," the largest often weighing over 200 lbs. The flesh is very thick, yellow, skin smooth, bright orange.	5	15	40	
Essex Hybrid.—Best keeper, some having been kept until June as sound and as good as when gathered. Grows quick; is early.	3	7	16	60
Summer Crookneck.—A good summer variety; an old favorite.	3	8	18	60
Winter Crookneck.—A very good keeper, hardy and productive.	3	8	18	60
White Bush Scallop.—Very productive, early, creamy, white.	4	8	16	55
Yellow Bush Scallop.—Similar to above, except yellow in color.	4	8	16	55

TOMATOES.

Tree Tomato.—Grows up like a tree without support of any kind, bears abundantly, fruit large, bright red color and fine flavor; very ornamental as well as useful.	5	25		
Conqueror.—Very early, fruit medium sized, fine flavor.	4	20	55	2 10
Paragon.—Large smooth, color bright glossy crimson, fine flesh.	4	18	55	2 00
Canada Victor.—Very early, good size, fine flavor, very hardy.	4	18	50	1 80
Advance.—Extra early, medium size, round, solid. Ripens in 90 days.	4	25	75	
Acme.—Very popular, early, fruit large, round, solid, smooth, and medium size.	4	18	50	1 80
Perfection.—Early, large, color blood red; smooth, solid; one of the best.	4	18	50	1 80
Trophy.—An old favorite in the home garden.	4	20	55	2 00
Beauty, Livingston's.—Very large, smooth, solid, purple color.	4	20	55	2 00
Cardinal.—Flesh, deep red, firm and solid; it is round, smooth.	4	15	50	1 75
Dwarf Champion.—New, growing very dwarf and compact, needing no support; very early, productive; flesh solid, fine quality.	4	20	60	2 25
Golden Queen.—Resembling the Paragon, but is of a deep yellow color.	4	20	60	2 25
Peach.—New, resembles the peach in size, shape and color, fine flavor.	5	30		
Yellow Plum and Pear-Shaped Yellow.—Good for Pickling.	4	25		
Husk or Ground Cherry, Strawberry or Winter Cherry.	5			

TURNIPS.

Extra Early Purple Top Milan.—The earliest of all, best for forcing, roots are smooth, white with purple top, flesh white of fine quality.	4	8	15	55
Early Purple Top Munich.—Next early, white with purplish white top.	4	8	15	50
Early Red or Purple Top Strap Leaf.—A general favorite, white below the surface, purple above; flesh white, sugary and well flavored; early and prolific.	3	7	12	40
Sweet German.—Well known, bulbs good size, white, solid, smooth, sweet, well flavored.	3	7	12	40
White Egg.—Flesh solid, fine grained, of good quality. Skin and flesh white.	3	7	12	40
Long Cowhorn.—Carrot-shaped, fine-grained, sweet, of delicious flavor.	3	7	12	40

If ordered by mail, please add 8c. per lb. for postage.

TURNIPS—Continued.

	Pkt.	Oz.	¼lb.	Lb.
Yellow Aberdeen.—Globe shaped, very productive.....	4	8	14	40
Golden Ball or Orange Jelly.—Flesh bright yellow, rich, sweet.	4	8	14	40
Pommerian White Globe—Productive; skin white and smooth.	4	8	14	40

RUTABAGA OR SWEDES.

Carter's Imperial.—Flesh yellow, solid, firm, sweet and rich.	4	8	15	40
Large Sweet German.—Flesh pure white, sweet; a splendid keeper.....	3	8	14	40
White Swede.—Large, white, solid and sweet.....	3	8	14	40
American Rutabaga.—Flesh yellow, smooth and solid, the best.	4	8	15	40

AROMATIC, SWEET, POT AND MEDICINAL HERBS.

	Pkt.	Oz.	¼lb.	Lb.
Anise.—Seeds have an agreeable aromatic odor and taste.....	3	8	25	90
*Balm.—Leaves are used for making a pleasant beverage.....	4	18	70	2 50
Basilicum.—Leaves used in flavoring soups or stews.	4	12	45	1 60
Borage.—Leaves used for flavoring, flowers furnish bee pasture.....	4	12	45	1 60
*Caraway.—Grown for the seeds which are used for flavoring.	3	8	24	75
Chervil.—Much used for flavoring and in salads.....	4	12	45	1 70
Catnip or Catmint.—Leaves and young shoots used for seasoning.....	4	50		
Coriander.—Seeds are used in the manufacture of liquor and confectionery.....	3	8	24	75
Dill.—Seeds have an aromatic odor and pungent taste.....	3	8	24	85
*Fennel.—Leaves are used in fish sauces, soups, garnishes, etc.	4	12	28	1 00
*Horehound.—Used in the manufacture of cough remedy.....	4	18		
Hyssop.—Used for tea in asthma and chronic catarrh.....	3	18		
*Lavender.—An aromatic medicinal herb.....	4	18	60	2 00
Marjoram.—The young tender tops are used green for flavoring or they may be dried for winter use.....	4	18	45	1 60
Mustard.—See page 36.				
*Pennyroyal.—Has a pleasant and agreeable odor and flavor..	4	25		
*Rue.—For medicinal purposes. Good for fowls; for the croup.	4	15	40	1 50
*Rosemary.—Leaves are used for seasoning.....	4	20		
Saffron.—Flowers are used in dyeing.....	4	18	45	1 50
Sorrel.—Broad leaved, used for salads.....	3	8	25	
Sage.—Used for seasoning and dressing.....	4	18	45	1 60
Summer Savory.—For flavoring soups, dressings, etc.....	3	8	30	1 00
Tansy.—Cultivated for its medicinal purposes.....	4	20		
*Tarragon.—For seasoning and culinary purposes.....	8			
*Thyme.—The young leaves and tops are used for soups, etc.. and a tea is made from the leaves, a remedy for headache.....	4	24	80	2 50
*Wormwood.—Used for medicinal purposes.....	4	24	75	

*Varieties with a * are perennials.

The Planet Combined Seed Drill.

It is, without doubt, the very best seed machine made for the two purposes, and does both well. The cultivating attachments furnished with each drill are a plow, a pair of protecting curved point hoes, a set of cultivator teeth, and a pair of rakes. All the blades are steel, hardened in oil, tempered and polished. A wrench accompanies each machine, and full directions for use. By removing the roller and using the hilling hoes, seed can be dropped and covered deeply. It can be seen that it is an excellent sower, it is a first-class double wheel hoe while plants are small; it is a first-class single wheel hoe; it is an excellent wheel scuffle hoe; it opens furrows for corn, beans and potatoes, and covers them; it is an admirable wheel cultivator. Weight, packed, forty pounds.

Our Vegetable Garden Seed Collections.

We call this our **Bargain Page**, although all our prices on every page of our catalogue are as low as they can possibly be; but here on this page we give our patrons special bargains. While we put these Vegetable Gardens up before the rush of spring trade begins, at the lowest possible expense to us, we are enabled to give our patrons these bargains. We send these Vegetable Gardens postpaid by mail upon receipt of price. They contain the best and earliest varieties, our own selection; we cannot make any changes considering the very low price.

THE LARGE VEGETABLE GARDEN. OUR GREAT \$1.00 COLLECTION.

This includes the following **35 Packages** of different varieties of Vegetable Seeds and **1 Packet of beautiful mixed Flower Seeds**, and these 36 packages we send postpaid for only one dollar:

1 Pkt. Wax Beans,
1 " Green Pod Beans,
1 " Early Round Blood Beet,
1 " Early Curled Borecole,
1 " Early Cabbage,
1 " Late Cabbage,
1 " Half Long Red Carrot,
1 " Early Erfurt Cauliflower,
1 " Celery,
1 " Celeriac,
1 " Sweet Corn,
1 " Curled Garden Cress,
1 " Pickling Cucumber,
1 " Long Green Cucumber,
1 " White Vienna Kohlrabi,
1 " Large Musselburgh Leek,
1 " Early Curled Lettuce,
1 " Head Lettuce,

1 Pkt. Musk Melon,
1 " Water Melon,
1 " Yellow Danvers Onion,
1 " Red Wethersfield Onion,
1 " Early Curled Parsley,
1 " Long White Parsnip,
1 " Early Peas,
1 " Pumpkin,
1 " Early Round Red Radish,
1 " Early Long Red Radish,
1 " Rutabaga or Swedes,
1 " Summer Spinach,
1 " Squash,
1 " Early Red Tomatoes,
1 " Purple-top Flat Turnip,
1 " Herbs (Marjoram),
1 " (Thyme),
1 " Choice Flower Seed Mixture.

THE SMALL VEGETABLE GARDEN. OUR GREAT 50c. COLLECTION.

We have in this **17 Packages** of different varieties of Vegetable Garden Seeds and **1 Packet of beautiful mixed Flower Seeds**, and these 18 packages we send postpaid for only 50 cents:

1 Pkt. Wax Beans,
1 " Round Red Blood Beet,
1 " Early Cabbage,
1 " Half Long Carrot,
1 " Sweet Corn,
1 " Pickling Cucumber,
1 " Kohlrabi,
1 " Early Curled Lettuce,
1 " Musk Melon,

1 Pkt. Onion,
1 " Early Curled Parsley,
1 " Extra Early Peas,
1 " Olive-shaped Scarlet Radish,
1 " Large-leafed Spinach,
1 " Early Red Tomatoes,
1 " Purple-top Flat Turnip,
1 " Herbs (Marjoram),
1 " Choice Flower Seed Mixture.

MAMMOTH RUSSIAN SUNFLOWER.

Mammoth Russian Sunflower.

A more profitable or important crop can hardly be raised, especially by prairie farmers. The seed is highly valued by farmers and poultry breeders who have tried it. The hens will fatten on it and lay more eggs than on any other food. Single heads measure from 12 to 22 inches in diameter and contain a lot of seed, which makes it cheap food for fowls. Next comes the great value as fuel; when dried, the stalks will make a good hot fire, while the seed-heads, with the seed in, will make a better fire than the best hard coal. One acre at least should be planted and used for either fuel or the seed for poultry.

Four quarts will plant 1 acre.

Price: By mail, postpaid, pkt., 3c.; qt., 23c.
By express or freight, qt., 14c.; 4 qts., 52c.;
½ bu., 70c.; bu., \$2.15.

OUR SELECT LIST OF BEAUTIFUL FLOWERS.

In this, our Select List of Flowers, we have included all the desirable and well-known varieties, and at such prices that all can afford to have flowers of some kind in their gardens.

We do not have any colored or other illustrations, but the quality of our seeds is equal to those offered by others with large illustrations, and our prices much lower than any, as will be seen by comparing.

The abbreviations, A., P., H., mean: A., annual; P., perennial; H., hardy. The number before the name are given for the convenience of making out orders, and can be used instead of writing the name.

The prices are for packets except where noted.

	Cts.		Cts.
1. Abronia, Umbellata, A.....	3	49. Carnation, New Margaret, P.....	8
2. Abutilon or Flowering Maple, finest mixed.....	8	50. Fine double mixed.....	8
3. Acacia, all colors, mixed, A.....	3	51. Catchfly, mixed, A.....	3
4. Acanthus Latifolius, P.....	4	52. Celosia or Coxcomb, dwarf mixed, A.....	3
5. Aconitum, mixed varieties, P.....	3	Centaurea or Cornflower, P.	
6. Adonis, choice mixed, A.....	2	53. Emperor William I, blue.....	3
7. Ageratum, all colors mixed, A.....	2	54. Bachelor's Button.....	2
8. Agrostemma, all colors, A.....	3	55. Dusty Miller, white.....	6
9. Alonsoa or Mask Flower, A., Grandiflora, scarlet.....	4	Chrysanthemums, annual varieties, double.	
10. Alyssum, sweet, A.....	3	56. White.....	3
Amaranthus, A., H.		57. Yellow.....	3
11. Love Lies Bleeding.....	3	58. Red.....	3
12. Tricolor.....	3	SINGLE VARIETIES.	
13. Fringed.....	3	59. White.....	3
14. Mixed varieties.....	2	60. Red.....	3
15. Anagallis, mixed, A.....	3	61. Yellow.....	3
16. Anthirrhinum or Snap Dragon, fine dwarf mixed, A.....	3	62. Splendid Mixture.....	3
Asters, New Victoria, A.		63. Cineraria, fine mixed, P.....	12
17. Emperor, white.....	8	64. Convolvulus-Minor, or Dwarf Morning Glory, mixed.....	3
18. Blue.....	7	65. Cuphea or Cigar Plant, A.....	4
19. Scarlet.....	7	66. Datura, many colors mixed.....	3
20. Queen of the Halls, bright rose.....	6	Dianthus—Pinks, A.	
21. Splendid Mixture.....	5	67. Double Chinese Pink, extra choice mixed.....	4
Asters, Pæony Flowered Perfection.		68. Pheasant's Eye.....	4
22. Ball Aster, pure white.....	7	69. Mourning Cloak, double.....	6
23. Schiller Aster, dark blue.....	6	70. Crimson Belle.....	5
24. Brilliant, scarlet.....	6	71. Diadem Pink, double.....	6
25. Mixed colors, extra choice.....	5	72. Double striped.....	5
26. Needle Asters.....	4	73. Splendid mixture of double varieties.....	4
27. Tall Asters, extra fine mixed.....	3	47. Digitalis, or Fox Glove, mixed, P.....	3
28. Dwarf Asters, all colors mixed.....	3	Double Daisies, or Bellis.	
29. Anemone, or Windflower, A.....	3	75. Double white.....	8
Balsams, Double Camelia Flowered.		76. Double red.....	8
30. Snow White.....	6	77. Finest Mixture.....	6
31. Crimson.....	3	78. Edelweiss.....	16
32. Scarlet Spotted.....	3	89. Eschscholtzia, fine mixed, A., H.....	3
33. Rose-Flowered Balsam.....	4	70. Eutoca. A., H.....	3
34. Dwarf Balsams.....	4	81. Forget-me-not, blue, A., H.....	4
35. Extra fine mixed.....	3	82. Double white.....	4
36. Brachycome, choice mixed, A.....	3	83. Fuchsia, finest mixture, P.....	9
37. Browallia, A.....	4	84. Gaillardia, or Blanket Flower, A., H.....	3
38. Cacalia or Tassel Flower, A.....	4	85. Gentiana, P., H.....	3
39. Calendrinia, Grandiflora, A.....	4	86. Gilia, mixed, A.....	4
40. Calendula, mixed varieties, A., H.....	2	87. Golden Rod, P., H.....	6
41. Calliopsis or Coreopsis, mixed, A., H.....	3	88. Godetia, many varieties mixed, A., H.....	3
42. Callirhoe Pedata, A.....	2	89. Hedisarum, A., H.....	4
43. Canterbury Bell or Campanula.....	4		
44. Candytuft, A., H., pure white.....	3		
45. Crimson.....	3		
47. Mixed varieties.....	3		
48. Canna, in splendid mixture.....	3		

		Cts.			Cts.
Helianthus, or Sunflower, A.					
90.	Silver King.....	3	139.	Portulacca, double mixed colors...	8
91.	Mammoth Russian	2	140.	Single, large flowering, in mixed colors.....	4
92.	Californicus, Tall, double.....	3	Poppy, A., H.		
93.	Heliotrope, fine mixture, P.....	4	141.	Single varieties, mixed colors.....	3
Hollyhock, P., H.			142.	Double varieties, mixed colors....	4
	Double white.....	8	143.	Penstemon, Finest Hybrids.....	4
95.	Double crimson.....	8	144.	Perilla, A.....	3
96.	Extra fine double mixed.....	6	145.	Potentilla, A.....	4
97.	Honesty, A.....	3	146.	Primula Auricula, P.....	7
Larkspur, or Delphinium, A.			147.	Primula Chinensis, or Chinese Prim-rose, finest mixture, P.....	16
98.	Double, dwarf, mixed	3	148.	Pyrethrum, large flowering, mixed,	3
99.	Double, tall, mixed.....	3	149.	Ricinius, or Castor Oil Bean, mixed, A.....	3
100.	Emperor.....	4	150.	Salpiglossis, large flowered, mixed, A.....	4
101.	Lavatera, A.....	3	151.	Salvia, mixed, A.....	6
102.	Linum, Grandiflorum Rubrum, A....	2	152.	Saponaria, A., H.....	4
103.	Lobelia, choice, mixed, P.....	3	153.	Scabiosa, fine mixed, A., H.....	2
104.	Lupinus, many colors mixed, A.....	3	154.	Sedum, or Stone Crop, A., H.....	3
105.	Marigold, or Tagetes, dwarf French, A.....	2	155.	Schizanthus, A.....	4
106.	Matricaria, or Feverfew, A.....	3	Stocks, German Ten Weeks.		
107.	Mignonette, mixture of many varieties, A., H.....	3	156.	Double, pure white.....	6
108.	Mimulus, or Monkey Flower, mixed, P.....	3	157.	" dark blue.....	6
109.	Mimosa, or Sensitive Plant, A. H....	3	158.	" scarlet red.....	6
110.	Mirabilis, or Four O'clock, mixed,	3	159.	" yellow.....	6
111.	Nasturtium, Dwarf or Tom Thumb, fine mixed, A.....	3	160.	Splendid mixture of different colors, single and double.....	5
112.	Nemophila, or Love Grove, fine mixed, A.....	3	Sweet Peas.		
113.	Nicotiana Affinis, A.....	4	161.	Pure white.....oz., 8c., pkt.,	3
114.	Nigella, A., H.....	4	162.	Blue....." 9c., "	3
115.	Nolana, mixed colors, A., H.....	3	163.	Red....." 9c., "	3
116.	Nycteria, P.....	4	164.	Black....." 8c., "	3
117.	Oenothera, or Evening Primrose, mixed, A.....	4	165.	Striped....." 9c., "	3
118.	Oxalis, for hanging baskets, P.....	6	166.	Splendid mixture of all the new and named varieties.. " 10c., "	4
Pansies.			Sweet William—Dianthus Barba-tus, P. H.		
119.	Large flowering, blue.....	4	167.	Double, white.....	8
120.	" " bronze.....	4	168.	" red.....	8
121.	" " violet.....	4	169.	" mixed.....	6
122.	" " white.....	4	170.	Single mixed.....	4
123.	" " yellow.....	4	171.	Torenia, for hanging baskets, A....	12
124.	" " striped.....	4	172.	Verbena, best mixture, P.....	4
125.	" " mixed colors.....	3	173.	Vinca—Periwinkle, mixed colors ...	6
126.	Chicago Park Pansies, for bedding, in finest mixture.....	4	Wallflower, P.		
127.	German mixture of Giant Pansies, in all colors.....	12	174.	Single mixed.....	3
128.	Petunias, white.....	4	175.	Double mixed.....	9
129.	Blotched and striped.....	4	Zinnias, A.		
130.	Dark red.....	4	176.	White.....	3
131.	Mixed colors.....	3	177.	Scarlet.....	3
132.	Large flowering, finest mixed	14	178.	Yellow.....	3
133.	" " fringed.....	14	179.	Fine double mixed.....	3
134.	" " double, mixed colors, which will produce about one-third double flowers.....	16	Selected Climbers.		
135.	Phlox, large flowering, dark red....	4	180.	Adlumia, or Cypress Vine, A.....	3
136.	" " white.....	4	181.	Bignonia, or Trumpet Vine, P.....	6
137.	" " pink.....	4	182.	Balloon Vine, A.....	3
138.	" " finest mixture of all colors.....	3	183.	Cocœa Scandens, A.....	3

184.	Convolvulus Major, or Morning Glory, A.....	Cts. 3		IMMORTELLÉS.	Cts.
185.	Dolichos or Hyacinth Bean, A.....	3	199.	Acroclineum, A.....	3
186.	Humulus japonicus, or Japanese Hop.....	3	200.	Ammobium, A.....	3
187.	Ipomœa, or Moonflower, A.....	3	201.	Gomphrena, or Globe Amaranth.....	2
188.	Lophospermum, A.....	4	202.	Helichrysum, A.....	3
189.	Maurandia, P.....	4	203.	Rhodanthe, A.....	
190.	Scarlet Runner, A.....	3	204.	Sanvitalia, A.....	
191.	Smilax, A.....	4	205.	Waitzia, A.....	3
192.	Thunbergia, P.....	4	206.	Xeranthemum, A.....	3
193.	Passion Flower.....	6		ORNAMENTAL GRASSES.	
194.	Gourds, Dish Cloth.....	3	207.	Coix Lachrymæ, A.....	3
195.	" Dipper.....	3	208.	Erianthus Ravenna, A.....	3
196.	" Sugar Trough.....	3	209.	Eulalia Japonica, P.....	4
197.	" White Nest Egg.....	4	210.	Lagurus Ovatus, A.....	4
198.	" Fine Mixed.....	3	211.	Stipa Pennata, P.....	3
			212.	All kinds mixed.....	3

ORNAMENTAL GRASSES.

We send these Flower Seeds, postpaid, at these prices to your postoffice.

For small orders, or less than one dollar, postage stamps can be sent, but these must not be handled with damp fingers, so as to prevent their sticking together.

March the 24 1894

Dear sir

want one

Brushed up your
Columbia potato
hear i want you
\$1.50^{ct} please sent at
once one package of
Coffee berry 10^{ct}
New Climbing
Japanese cucumber
10^{ct}
\$2.00

The full address should be written plainly in every letter or order sent to us, and although this may seem an unnecessary request, we receive many orders during the season with money enclosed, where the sender has neither given the name or his postoffice or his state where he lives, or anything to enable us to find out by whom the order has been sent. A sample of these orders we have reproduced by the photo-engraving process; this letter we received last spring, with \$2.00 enclosed, but, as all will see, we are unable to fill this order, because no name or anything is given in this letter.

We have quite a number of these orders, and a lot of letters, where the address is deficient, filed away, and as much as we would like to send the goods or answer the

letters, we are unable to do so, and fear the parties who sent these letters are very mad at us or calling us bad names because we did not send the goods or answer their letters, but they do not think for a moment that it can be their fault. Therefore,

BE SURE AND WRITE YOUR FULL ADDRESS

(Name, Postoffice, County and State,)

PLAINLY IN EVERY LETTER OR ORDER.

THE LENOX SPRAYER.

LENOX SPRAYER.

side of the box by the machine. It does its work well and never gets out of order or repair. At the low price we offer it no one need be without a corn sheller any more. Each, \$2.20; 3 for \$5.25.

HAND CORN SHELLER.

About the handiest thing on the farm. With it you can shell a bushel of corn in from 4 to 5 minutes. The sheller can be attached to a box into which the kernels fall while the cobs are thrown out.

HAND CORN SHELLER.

We do not know of a more popular and at the same time cheaper fanning mill than the Excelsior. We have sold quite a number during the last few years and everyone is satisfied with them. It is the best general purpose mill. The feed is large and the sieves are 24 inches. The following sieves belong to it: A wheat hurdle with zinc sieves on top, a wheat grader, a wheat screen, an oat sieve, a barley sieve, also a set of timothy and clover sieves. This whole outfit we have always sold for \$15.00, but as times are hard now we ship the mill and sieves mentioned above, loaded on the cars, for only \$12.52.

THE EXCELSIOR FANNING MILL.

HAND GRIST MILL.

This mill is greatly appreciated by all who either live far away from a custom grist mill or who like to have their corn meal, graham flour, hominy or cracked wheat always fresh and pure. With this mill anyone can grind his supply and always have it fresh. Our price is only \$4.10 each, 3 for \$12.00.

HAND GRIST MILL.

direction. The pods, of which there are from 150 to 250 on a plant, touch each other. It grows from two to three feet in height, and when planted in rows three feet apart, meet in the middle of the rows, thus forming one mass of pods. The pods contain on an average from two to three seeds, somewhat resembling a marrowfat pea, and when dry can be roasted, ground and prepared like the coffee berry.

We append extracts taken from the numerous testimonials furnished by the introducer:

"I have used it and consider it equal to imported coffee." "Scarcely distinguishable from imported coffee when prepared the same way." "It is one of the most wonderful discoveries of the age, and will gladden the hearts of those who are unable to have the luxury as often as they would like to. We have used it and never tasted anything which comes so near the genuine."—(Extracts from the Christian Advocate of St. Louis, Mo.)

It is claimed that owing to the extraordinary productiveness of this plant, that coffee can be made from it at a cost of less than one cent per pound.

CULTURE.—The rows should be planted three feet apart, one berry every ten inches apart in the row. Cultivation like corn or beans, and should be planted about the same time. Will mature in all latitudes in four and a half months.

In addition to its "coffee" merits, it is claimed that it is very improving to land, on account of its immense foliage, which sheds when it begins to ripen in the fall, and to be much more fattening to hogs than corn. Price, per large pkg., 8c.; 1 oz., 18c.; ¼ lb., 60c., by mail, postpaid.

WILSON'S BONE MILL.

For grinding oyster shells, bones and other things for poultry. Each, \$4.50.

NEW AMERICAN COFFEE BERRY.

Planet Junior Double-Wheel Hoe, Cultivator, Rake and Plow Combined has the invaluable feature of tending both sides of the row at once. The wheels can be set four, seven or ten inches apart. It has a pair of hoes, a pair of plows, two pairs of cultivator teeth, a pair of rakes and a pair of leaf lifters, making it capable of every variety of gardeners' work. Almost any child can run this and do effective, clean and quick work. It is well made, light and durable, and will nearly save its price in a week's work.

Our net price is only \$5.50 each.

**PLANET JR. DOUBLE-WHEEL
Hoe, Cultivator, Rake ^{AND} Plow
COMBINED.**

Our Net Price, \$5.50.

List Price, . 8.00.

**PLANET JR. SINGLE-WHEEL
Hoe, Cultivator, Rake ^{AND} Plow
COMBINED.**

Our Net Price, \$4.65.

List Price, . 6.00.

Planet Junior Single-Wheel Hoe is considerably lighter than the Double, and is supplied with one pair of hoes, three reversible cultivator teeth (two narrow and one broad), a large garden plow, and a pair of rakes. It is capable of a great variety of combinations, and is admirably adapted to the use of small gardens.

Our net price is only \$4.65 each.

New Model Seed Drill

Price, \$6.50.

NEW MODEL SEED DRILL. Price, \$6 50.

One of the best drills made. It has an excellent marker, a broad wheel, lending ease to work the machine; a good covering roller. The flow of seed can be instantly stopped by a swinging cut-off, conveniently operated by a cord or ring on handles. The index or indicator is plain, convenient and reliable, and is placed in open sight. Holds two quarts of seed and will sow this amount or a 5c. package with equal ease, rapidity and accuracy.

PLANET JUNIOR No. 2 DRILL. Price, \$6.45.

Planet Junior No. 2 Drill.—It has the following important advantages: An adjustable opening plow directly between the carrying wheels, the only position and plan which insures opening and covering at a regular depth. It is shown in the engraving at work. A spring back reservoir which can be accurately and instantly adjusted a hair's breadth at a time to every kind of seed, which it always sows with regularity, whether there is much or little in the hopper. Weight packed, 40 pounds.

Price, \$6.45.

See page 56 for Planet, Jr., Combined Drill, Cultivator, etc.

Buy your Seeds direct from the Farmers and Growers! Think for a moment what it all means.

Mr. E. W. Ahlers, of Hannibal, Mo., wrote, on November 14, 1894: "The Clover-Grass Mixture I bought of you last spring I sowed in early spring without a nurse crop and covered it up lightly. The seed came up nice and grew splendid until the middle of the summer, when the long and severe drought, from the effects of which even trees in the orchard and timber died, killed quite a few of the grass and clover plants, but on the low places there is enough left to make a good, close and firm sod, while with a little reseeded the higher places will be all right too. I am very well satisfied and will order more next spring."

Mr. W. Guelzow, Hustisford, Wis., sowed 200 lbs. of our Clover-Grass Mixture last spring and writes us as follows about his results on the 31st of October, 1894: "I sowed the Clover-Grass Mixture with oats in the spring. It came up fine and grew very nicely until the long drought not only checked its growth but apparently killed it all so that I thought best to plow it up again. But in September we had a few showers and my grass began to get a little green, and I concluded then not to plow it up but let it lay a little while. In October it rained frequently, and now at the time of this writing (October 31st) the stand is first-rate and does not show having suffered much from the drought, only in places where the land is light and gravelly the stand is a little thin; but I am very well satisfied and hope to have a fine pasture of this seeding next year."

We would like to hear from anyone who sowed Timothy and Clover last spring, if that recovered as quickly as our Clover-Grass Mixtures, as stated here by Mr. Guelzow and Mr. Ahlers and others. **GRASS IS KING**, and our Clover-Grass Mixtures are just the thing for this country.

Mr. G. Geissler, Glidden, Wis., wrote, November 6, 1894: "Sowed the Clover-Grass Mixture this spring by itself, without a nurse crop, and it came up good and grew well. The dry weather did not affect it very much; even had better pasture on this new seeding the past summer than on my old pasture land."

(We never advise pasturing new-sown grass or Clover-Grass Mixtures, but the Clover-Grass Mixtures are so thrifty and give such a nice thick stand the first year that many will do it.)

Mr. J. C. Maass, North East, Pa., wrote, November 8, 1894: "I sowed several acres with your Clover-Grass Mixtures this spring, sowing the seed right into Winter Rye. It came up nicely and grew fine, and after harvest it soon covered the ground thickly, and the stand now is very good and cannot be better; it leaves nothing to be desired. The stand is so good that several neighbors thought I had already cut the grass, although it was only sown in Winter Rye in the spring and had the only chance to grow after harvest in the rye stubble which it soon covered."

Mr. C. P. Case, Case, O. T., writes us, under date of July 13, 1894: "I am well satisfied that your Clover-Grass Mixture is all right, as it all came fine, but we had a washing rain immediately afterwards which washed some out and covered some up, but what remained grew as I never saw grass seed grow before. I did not cut it but let it go to seed and think there will be a good stand another season."

Mr. H. Scheel, of Hanover, Wis., writes us about his success with our Clover-Grass Mixtures: "Within the last two years I have sowed between 50 and 60 acres with your Clover-Grass Mixtures, both for permanent pasture and meadow, and the results have always been very satisfactory. I am convinced that whoever wants to be treated honest and square should deal with you. *I found that I can depend upon your word.*"

Mr. Geo. Dannen, Van Cleve, Ia., ordered 200 lbs. of our Clover-Grass Mixture C. No. 1, in March, 1894, and wrote us as follows about his results, on December 3, 1894: "I expected that my seeding this spring would be a total failure, although it came up fine, being sown with oats the first part in April, but it was very dry here in central Iowa, no rain all summer, and impossible for grass seed to grow. A few weeks ago I went over the field again and was gladly surprised to find grass plants as well as clover on the piece, especially on low places, and think there is enough to look for a good stand by next year. This result is so satisfactory to me that I herewith send you names of my neighbors to whom you can send your 'Permanent Pastures and Meadows,' and believe they will also try your Clover-Grass Mixtures."

Mr. L. Albers, Monee, Ill., sowed nearly 500 lbs. of our Clover-Grass Mixture last spring, and wrote us, under date of November 27, 1894: "The Clover-Grass Mixture was sown the middle of April with a nurse crop. It came up fine and did not suffer from the drought last summer excepting a little in a few places where the soil was not very good; otherwise the stand is very satisfactory at this time and the outlook for a good permanent pasture very good."

Mr. E. F. Rosen, Salt Creek, Ill., sowed a piece of about $1\frac{1}{2}$ acres to permanent meadow in 1892, and wrote us then, in October, 1892, as follows: "Last April I sowed the Clover-Grass Mixture C. No. 1 with oats, and it sprouted exceedingly well. In a short time the fine green of the young grasses could be seen between the oats, and soon covered the ground. After cutting the oats the young grass was higher than the oat stubble. Now began a hard time for the grass; no rain came and the ground became as hard as a brick, and is that way to-day. Notwithstanding this, the grass is still fresh and green, and on the whole piece there is not one place even as large as a hand with no grass on it. This success causes me to be very well satisfied with your Clover-Grass Mixture, and whatever I can do to recommend your firm to my neighbors I shall do with pleasure."

On November 24, 1894, Mr. Rosen wrote again: "You will probably like to know what success I had with my meadow the past very dry summer, and must say that it has done very well and the result has been very good, notwithstanding the long drought. From one-half the piece (about $1\frac{1}{2}$ acres) I cut the grass for feeding green while I made the other half into hay, and this gave me $1\frac{1}{2}$ loads or about 2 tons of the finest hay. At the present time, so late in the fall, the meadow is nice and green and shows no sign of being hurt by the drought. Wishing you all the success you deserve in your new home, I am, yours very truly."

Mr. F. Gehler, Canton, Wis., writes us: "The grass seed I ordered from you last spring was the best and nicest I ever bought anywhere; every kernel grew. I have never before received such nice seed from anyone, and would be glad if all brother farmers would send their orders to you."

Mr. Oswald Freitag, New Glarus, Wis., writes: "Am very well satisfied with the grass seed bought of you; it was good seed, and I sowed it with grain. After harvest it grew so nice that I had a good pasture on it."

Mr. Kesselmeier, of Galion, Ohio, writes: "Please send me one of your catalogues, or book on Permanent Pastures and Meadows. I saw the meadow Mr. Schuh had from your Clover-Grass Mixture and it shows a wonderful crop. Mr. Schuh said that your book would state the kinds of grasses to use for different soils, and I will want the same kind of seed."

Please note from these letters, on pages 17, 18, 34 and this page, that while the great drought caused the Clover-Grass Mixtures as well as the Timothy and Clover to dry up during the hot, dry weather, the Clover-Grass Mixtures revived and started to grow again after the first shower, while fields sowed with Timothy and Clover only were dead and had to be plowed up, and the seeding with Clover-Grass Mixtures promises a good crop for next year. The fields sown with Timothy and Clover alone will mostly have to be resown again. A sowing is thereby not affected if our Clover-Grass Mixtures had been sowed in the first place, and we would ask the thoughtful farmer to do some suggestive figuring here.

BEST APPLE TREE ON EARTH.

THE PEERLESS APPLE.

By reading the head line, our friends may smile and think we have made a very broad statement, but we only ask you to read this page carefully, and we believe that you will then say with us that the Peerless is the best apple tree on earth. We are only sorry that for want of space we can give here but a brief outline of the history of this remarkable apple tree, but it will convince all of its great merits. To those desiring more information we will be glad to send a full descriptive circular of the Peerless apple tree.

PEERLESS is a seedling from the Duchess of Oldenburg, which was grown from the seed right here in Minnesota 27 years ago last summer; this old tree is standing on black prairie soil, and has been a heavy bearer for 20 years. On the same kind of soil as well as in better soil and more favorable locations in the neighborhood of this old tree, there have been during the past 40 years at least 1,000 different kinds of apple trees tried; hundreds of thousands had been set and came

into heavy bearing, but were all killed during the winter of 1872. The Peerless was then 5 years old. It stood on the prairie amongst 300 Duchess seedlings of the same age. The spring of 1873 found Peerless and about a dozen of the other seedlings alive, everything else except the old Oldenburg and a few crab trees being dead. That is the means Nature has always used to find trees adapted to a climate: the weak ones are killed and those able to stand her severe trials are saved. The owner of these seedling trees, Mr. J. G. Miller, transplanted the live seedlings into the orchard in the spring of 1873. Some of them began to bear in 1875. Wishing the opinion of some expert on the bearing seedlings, Mr. Miller sent word to Mr. Brand, the best authority known on seedling apple trees, a man who had traveled farther to see seedlings, and who had tried more and seen more tried than any other man in the United States; coming to Minnesota in 1854, after large experience in Illinois and Wisconsin in the nursery business. Mr. Brand was convinced that an apple tree to succeed for a long term of years here, which is about the most difficult climate in the United States in which to grow apples, would have to be produced from seed grown in this climate.

Mr. Brand went to see Mr. Miller's seedlings. As soon as his eye rested on the tree now called Peerless, he stopped and looked at it in amazement. He had never in all his life seen such a leaf and such bark. He tried to buy the right of the tree on the spot, but the price he offered for the cions apparently so frightened Mr. Miller that he concluded he would not have the tree cut for fear he might lose it.

Mr. Brand did not get it then. It bore abut a bushel in 1876, 3 bushels in 1878, 5 bushels in 1880, 7 bushels in 1882, and nearly 10 bushels in 1884. Then came the worst tree-killing winter ever known throughout the North. The new list of supposed ironclads, including about 300 varieties of Russian apples, were practically all killed. Did it hurt the Peerless? Apparently not, for it bore about 1 bushel of extra large apples in 1885 and 11 bushels in 1886. Mr. Brand saw it that summer after a tornado had passed over it, August 21st. The tornado left 3 bushels of apples on the tree. Viewing it then, he was irresistibly impressed that it was the tree that the Almighty had created for our severe climate. At a price probably ten times greater than ever before paid for an apple tree, Mr. Brand bought the entire control of the old tree and also of every young tree grown from it, and also of every bud or cion that might be taken from them for a long term of years, Mr. Miller never before having sold or given any away. He concluded to sell it in such a way that other nurseries could not get hold of them, so he made a contract with each purchaser to protect his rights and interests. These contracts run so long that other parties cannot have 2-year old trees for sale before the fall of 1897. About 2,700 men have now got Peerless trees. About 2,600 of them have paid \$10.00 for 6 trees, and at that very high price they have generally all been engaged 1 and 2 years ahead. During the past summer he has sold a large number of orders of 50, 100, 300, 500, and 3 orders of 1,000 each, to Minnesota fruit growers. It is the only variety being planted in such large numbers here in Minnesota.

This remarkable tree we are glad to offer our brother farmers, and at a reasonable price, so all can afford to plant a half a dozen this spring. To obtain 6 Peerless trees, write to us and we will send you the contract order which each one must sign in order to get the trees, and then return it to us with the price for 6 Peerless trees, which we have made \$7.50 instead of \$10.00 charged heretofore, and the order will be entered upon our books and shipped in its regular course. At our price of \$7.50 for 6 Peerless, we send them prepaid or free by express to your express office, so there is no delay. None of the trees are less than 3½ feet, and some are 5 feet. Every tree is warranted to grow. The Peerless is a great bearer and 6 trees will produce a large quantity of this best of all fruit. As the stock of this great apple is limited and the demand great, would advise all to send their order at once.

We are also prepared to fill orders for other fruit or ornamental nursery stock adapted for the cold Northwest, and inquiries from all wishing to secure and plant the best Minnesota-grown stock will be promptly answered either by ourselves or Mr. Brand.

BUY YOUR SEEDS DIRECT FROM THE GROWERS!

Think for a moment what this all means. Consider the facilities we have for growing the best Northern-grown seeds, and then look at our prices. Will it not be to your advantage to send your orders to us this spring?

SACALINE, THE NEW FORAGE PLANT.
Showing two months' growth.

SACALINE.—*Polygonum sachalinense*.

A new forage plant from Russia.

The long and severe drought of the past summer has again demonstrated the value of forage plants which are capable of producing abundant crops even in the driest and most unfavorable seasons, and not being affected by heat or drought. Last spring we introduced the new forage plant *Lathyrus Silvestris Wagneri*, and it has proven itself to be of great value and should be more cultivated and larger tracts sown. (See page 19.) This year we bring to the attention of our brother farmers another new forage plant, Sacaline, after satisfying ourselves of its great drought-resisting and other valuable qualities.

We will here give only a short description of it, but those wishing more and full information about Sacaline should send for our special pamphlet which we have prepared, and we will send it to any address upon receipt of 5c. in postage stamps.

Sacaline is a native of Siberia and perfectly hardy everywhere. As an ornamental plant it has been grown for 12 years at the Iowa Experimental Station, and the original plant is still standing there. It has also been grown in New York and Massachusetts. Its roots penetrate the ground so deeply that it requires no manuring, yet it will grow more luxuriantly in rich, moist lands.

Once planted, it stands forever. That it stands the drought well is a well-established fact, and one of the qualities claimed for it is that it will grow not only in poor soils but also in marshes, swamps and wet places, such as ditches and river banks. In France it has been recommended for railroad embankments as a protection against landslides.

Cultivation and Planting.—The cultivation of Sacaline is very simple. The seed should be sown in boxes of very rich soil and kept wet and protected from frost; the plants should afterwards be set out 3 feet apart each way. The seed may also be sown where wanted and the plants thinned out properly afterwards.

By far the quickest result, however, will be obtained by procuring roots and setting these out at any time of the year, 3 feet apart each way. They will begin to grow early and soon cover the entire field.

The Yield and Crop of Sacaline.—As soon as the stems are 4 to 6 feet high they can be cut close to the ground and fed to the cattle. If the second growth is vigorous, another cutting can be made. The last cutting is made in late autumn, before frost. The following years three, and often four, cuttings can be made. In good soils it will produce from 44 to 48 lbs. of green forage per square yard, or over 90 to 180 tons to the acre.

The seed is so scarce and is valued so highly that in France it has been sold already for \$400.00 for single pounds.

We have obtained some of the seed at very reasonable prices, but can offer it only by the packet and at the low price of 12 cents per packet.

We will also have some plants in the spring and the price of these is 20c. each; 3 for 55c.; for 90c. These plants will be sent the last of March or first of April, but should be ordered as early as possible as we may be obliged to return the money for late orders.

Pamphlet of 16 pages about this new forage plant for 5c. in postage stamps.

TEXAS BLUE GRASS.

A valuable hardy winter grass for the South, and it is claimed that as far north as Kansas it endures the winters and resists droughts perfectly. It makes a good sod and much more pasture and hay than its near relative, Kentucky Blue Grass, and the longest, driest and hottest summer will injure it. The great drawback to the general cultivation of this grass is the difficulty with which the seed is obtained, making it very high in price also. The seeds are of a woolly, silky nature. Price, pkt., 8c.; oz., 25c.; $\frac{1}{4}$ lb., 90c.; lb., \$3.15.

BROMUS INERMIS.

BROMUS INERMIS, OR AWNLESS BROME GRASS.

Also called Hungarian Brome Grass.

For several years we have recommended this as a most valuable grass because of its great ability to resist drought and thrive and give abundant pasture or hay crops in dry seasons when everything else would fail, but somehow it has not been sown to such an extent as it deserves. Now the past very dry summer, as well as the dry season preceding it, has demonstrated the great value of this grass. We have decided to give it a prominent place this year and call the attention of all that do not know of it and its great value.

It remains fresher and greener during a larger part of the year than almost any other grass. It produces a great amount of long, tender leaves very near the ground, while the culms are slender and not numerous, and it covers the ground very evenly. It is thoroughly permanent, grows rapidly, and produces excellent pastures as well as good and heavy hay crops. It will stand the longest drought of all forage plants, and is equally good for pasturing, making hay, or cutting and feeding green. All kinds of stock eat it greedily, and it is very rich in nutritive value or flesh-forming ingredients.

The Department of Agriculture has been experimenting with this grass at its Experimental Stations in the arid regions, and drought stricken districts, and the Grass Experiment Station at Garden City, Kansas, says: "Bromus inermis is the grass for this Western country. It is green from the middle of March until about November."

This Bromus inermis is easily cultivated. It will grow on all kinds of soil, even yellow sand, but of course does not produce so abundantly on this. The seed is sown in early spring at the rate of 30 lbs. per acre, or in fall at the rate of 15 lbs. per acre.

acre if alone or by itself; when sown together with Alfalfa, which does well with it, about 15 to 20 lbs. per acre are sufficient.

We have put our price very low this year so all can afford to give this most valuable grass for hot and dry regions, at least a trial, although larger tracts can be safely sown since the great value of it has been so well established. By Freight or Express, 1 lb. 28c; bu. (14 lbs.), \$3.70; 100 lbs., \$24.95. By mail, postpaid, lb., 36c; 4 lbs., \$1.40.

BERMUDA GRASS.--*Cynodon dactylon*.

For the Southern States particularly this grass is best adapted and of great value there. It is the chief reliance there for pasture and hay, furnishing rich and green pasture during 9 months of the year; on good land it will cut 2 to 4 tons of nice hay per acre. It grows wherever corn and cotton grow. Is also used extensively to hold levees along rivers or embankments of the roads, and is very valuable there, as its long creeping roots soon form a compact mass, holding the soil together and preventing it from washing or gullyng. It has the capacity to withstand any amount of heat, and droughts that are so dry as to check the growth of Bermuda Grass, etc., will only make the Bermuda greener and more thrifty. For the South this is invaluable. Formerly it had to be propagated by sets mostly, but we have secured good germinating seed of this valuable grass, and although the price seems high, it is cheap considering its great value. Pkt., 5c.; oz., 15c.; 1 lb., 55c.; 4 lbs., \$1.75; 4 lbs., \$6.40; by mail postpaid.